Federal Court  Cour fédérale

Date: 20240814

Docket: T-379-21

Citation: 2024 FC 1260

Ottawa, Ontario, August 14, 2024

PRESENT: Mr. Justice McHaffie

BETWEEN:

MOLO DESIGN, LTD

Plaintiff

and

CHANEL CANADA ULC, PROCÉDÉS CHÉNEL INTERNATIONAL SA, AND CHANEL SAS

Defendants

AND BETWEEN:

CHANEL CANADA ULC, CHANEL SAS, AND PROCÉDÉS CHÉNEL SARL

Plaintiffs by Counterclaim

and

MOLO DESIGN, LTD

Defendant by Counterclaim

JUDGMENT AND REASONS

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I. Overview

[1] For about two months in early 2021, the windows of Chanel stores around the world, including in Canada, had displays incorporating elements made of large blocks of "honeycomb" tissue paper. Such paper, familiar to many from its use in festive decorations, is made by gluing multiple sheets of paper together with offset lines of adhesive. When pulled apart or expanded, the sheets form a honeycomb-like lattice that takes on a three-dimensional shape. Chanel's window décor used structural elements made of large white and black blocks of this paper, with the last sheet of each block folded on itself and joined with hook and loop fasteners.

[2] In conceptualizing and developing its 2021 window décor, Chanel used "mood boards" that included pictures of products made by Molo Design, Ltd called "softwall" and "softblock." Softwall and softblock are flexible partition products incorporating honeycomb lattice material, for which Molo's co-founders, Canadian architects Stephanie Forsythe and Todd MacAllen, have received numerous international awards and recognitions. Softwall and softblock are said to embody Molo's Canadian Patent 2,527,927 [the '927 Patent], entitled "Flexible Wall System," which names Ms. Forsythe and Mr. MacAllen as inventors.

[3] Molo alleges that in implementing its window décor, Chanel deliberately chose not to purchase its patented softwall and softblock products, but to use cheaper copies supplied by a former distributor of Molo's products in France, Procédés Chénel SARL. Molo claims that in doing so, Chanel (*i.e.*, Chanel SAS and Chanel Canada ULC) and Procédés Chénel infringed 11 of the 17 claims of the '927 Patent.

[4] The ’927 Patent claims articles of *flexible furniture* including a *partition* having a *core* formed from, in essence, honeycomb lattice material, with a *pair of supports* at opposite ends of the *core* that provide *rigidity* to the *core* to provide a *freestanding wall*. The central issue between the parties is whether the blocks of honeycomb paper in Chanel’s window décor had a *pair of supports* as that term is used in the claims of the ’927 Patent. Chanel argues the blocks were simply honeycomb paper with nothing added to the ends other than fasteners, and they therefore had no *pair of supports* within the meaning of the patent. Molo argues the two outer sheets of the honeycomb paper blocks provided the necessary *rigidity* to the *core* and constituted a *pair of supports*.

[5] For the reasons set out in greater detail below, I conclude that the skilled reader of the ’927 Patent, reading the claims purposively in the context of the patent as a whole and in light of their common general knowledge, would understand the *pair of supports* in the claimed articles of flexible furniture to be separate elements distinct from the *core*, which provide *rigidity* to the *core* and are thus more rigid than the *core*. The honeycomb tissue paper elements used in Chanel’s window décor did not have a *pair of supports* within the meaning of the claims of the ’927 Patent. Molo’s arguments that the outermost sheets of Chanel’s block of honeycomb tissue paper constitute a *pair of supports* and not part of the *core* are not persuasive, and there was no cogent evidence that the outermost tissue paper sheet provided any *rigidity* whatsoever to the other tissue paper sheets in the block. As Chanel’s products did not comprise all of the essential elements of the claims, the ’927 Patent was not infringed. Given this conclusion, I need not address Procédés Chénel’s additional argument that all of its activities were conducted in France and it therefore cannot have infringed a Canadian patent.

[6] Chanel and Procédés Chénel also assert, both in defence and by way of counterclaim, that the ’927 Patent is invalid in light of prior art publications, including Molo’s own disclosure of partitions incorporating honeycomb paper more than a year before it filed for a patent. For the reasons set out below, I find that Claims 1 and 2 of the ’927 Patent are invalid as having been anticipated or obvious in light of the prior art.

[7] However, Claim 3 of the ’927 Patent—which claims the article of *flexible furniture* described above with the added limitations that the *pair of supports* are *flexible* and may be folded into a *tubular configuration* and that they have *fasteners* on them to maintain that configuration—is not anticipated, or rendered obvious, by the prior art. Claim 3 and its dependent claims are valid, but were not infringed. The asserted dependent claims are invalid as they depend from Claims 1 and 2, but not as they depend from Claim 3.

[8] Molo’s action is therefore dismissed. The counterclaims of Chanel and Procédés Chénel are granted in part. The parties may make submissions on costs in accordance with the schedule set out at the end of these reasons.

[9] I commend and thank all counsel for their thoughtful and skillful presentations.

II. Issues

[10] As is common in patent cases, the primary issues in this action are those of construction, infringement, and validity. Chanel also raises a defence based on the House of Lords’ decision in *Gillette Safety Razor Company v Anglo-American Trading Company Ltd* (1913), 30 RPC 465

(HL). The *Gillette* defence has been described as a "shortcut" that may obviate the need to address other issues in some cases. I will therefore consider it before turning to the other questions.

[11] The determinative issues are therefore the following, which I will address in sequence after a brief overview of the evidence presented at trial:

A. Is this an appropriate case to address the *Gillette* defence?

B. How would the skilled reader construe the claims of the '927 Patent?

C. Did the defendants infringe one or more of the claims of the '927 Patent?

D. Are one or more of the claims of the '927 Patent invalid?

[12] The defendants' case on these issues was primarily led by Chanel, with Procédés Chénel adopting and relying on Chanel's submissions. For ease, I will refer to the defendants' arguments and positions on these questions as being those of Chanel. Procédés Chénel focused its own evidence and arguments on particular issues relevant to the infringement allegations against it, notably the questions of territoriality, inducing infringement, and infringement by common design. Given my conclusions on other issues, I need not address these questions. Nor do I need to address the question of remedies, and in particular Molo's claims for "nominal" and punitive damages.

III. Overview of the Evidence

A. *Lay Witnesses*

[13] Molo's primary fact witness was **Stephanie Forsythe**, co-founder of Molo and one of the inventors of the '927 Patent. She spoke to the founding of Molo and its successes, the development of the softwall and softblock product, and the invention said to be reflected in the '927 Patent. She testified to the recognitions and awards the softwall and softblock products have received, including the Museum of Modern Art [MoMA] in New York acquiring several softwall modules for their permanent collection in 2005, and the softwall being awarded one of the inaugural "Index Awards," described as the largest design awards in the world. Ms. Forsythe also spoke to Molo's former relationship with Procédés Chénel, subsequent disputes between the companies, and inquiries Molo received in connection with Chanel's window décor project.

[14] Molo also called evidence from two witnesses who spoke to the qualities of Molo's softwall and softblock products and their knowledge of awards Molo had won for the products. **Catherine Osborne** is an architecture and design consultant and former editor-in-chief of Azure, an architecture and design magazine. Ms. Osborne was a jury member for the "ICFF Editors Awards" at the International Contemporary Furniture Fair in New York in 2004, and awarded one of those awards to Molo. Her magazine Azure also issued awards to Molo in 2011 for various product lines, including softwall and softblock. **Kigge Hvid** is the founder and former CEO of the Index Awards referred to above. Ms. Hvid spoke to Molo being one of the first recipients of that award in 2005, and the qualities of the softwall that merited that distinction.

[15] Chanel called evidence from two of its employees who were involved in the window décor at the heart of this litigation, which was deployed for a Chanel fashion collection known as "Spring/Summer 2021 Act 1" [SS21 Act 1]. **Benedetto Rigo** is Global Head of Window Design for Chanel SAS. He spoke to Chanel's general process for developing window treatments and to the development and implementation of the SS21 Act 1 window décor in particular. **Christina Diaconescu** is Head of Visual Merchandising for Chanel Canada ULC [Chanel Canada]. She spoke to Chanel Canada's implementation and installation of the SS21 Act 1 window décor in Chanel stores in Canada.

[16] Chanel also called **Bernhard Thonhauser** to testify. Mr. Thonhauser is General Manager of Fest-Dekor GesmbH, an Austrian paper decoration company founded by his parents in 1982 that makes, among other things, honeycomb tissue paper. Fest-Dekor manufactured the honeycomb paper used in Chanel Canada's SS21 Act 1 window décor. Mr. Thonhauser spoke to Fest-Dekor's business and products, currently and historically, including the processes and machines used to produce honeycomb tissue paper.

[17] Procédés Chénel called evidence from its Managing Director, **Sophie Chénel**. Ms. Chénel spoke to her family's decoration business, originally founded in 1896 by her great grandfather and now carried on by Procédés Chénel, and its current product lines. She addressed Procédés Chénel's role as a distributor for Molo between 2007 and 2009, the subsequent disputes between the companies, and Procédés Chénel's involvement in supplying the honeycomb paper elements for Chanel's SS21 Act 1 window décor.

[18] Finally, Chanel also filed affidavit evidence, without objection or cross-examination, from **Nathaniel E. Frank-White**, a Records Request Processor at the Internet Archive. Mr. White's affidavit speaks to the nature of the Internet Archive, its Wayback Machine service, and exhibits copies of certain archived files from the Internet Archive.

B. *Expert Witnesses*

[19] As discussed further below, the parties agree that the '927 Patent is directed to a person skilled in industrial design. Molo and Chanel each called an experienced industrial designer to give expert evidence to assist the Court in performing its task of understanding the '927 Patent and the prior art.

[20] Molo's expert, **Paul Hatch**, has over 25 years' work experience in the area of product design and industrial design, acting as both an industrial designer and a consultant in the area. He has received numerous design awards over the years, including being nominated into the Academy of Fellows of the Industrial Designers Society of America. He is a named inventor on many design and utility patents, covering a wide range of products including power tool handles, ring binder mechanisms, food product dispensers, and vision measurement devices. He holds an Honours Bachelor of Arts degree in Industrial Design from the University of Northumbria at Newcastle, United Kingdom, and is currently pursuing a doctorate in Learning Sciences at the University of Illinois in Chicago, where he acts as a member of Adjunct Faculty.

[21] Mr. Hatch was qualified, without objection, as an expert in industrial design with particular expertise in product design, retail displays, and designing, with different and

unconventional materials, with further expertise in paper and card folding fabrication, and as an expert in running a multi-disciplinary design team comprising industrial designers and mechanical engineers.

[22] Chanel's expert, **Steven C. Visser**, is a Full Professor in the Industrial Design Program at Purdue University, where he has been teaching since 1989 after working briefly as an industrial designer in private industry. Prof. Visser also runs his own industrial design consultancy business. He has received numerous awards and recognitions in the area of design, including being named the "World's 7th Best Designer in 2021" by DAC World's Leading Designers. Prof. Visser is a named inventor on a number of design and utility patents, covering products ranging from video game controllers to clamps to chair support structures to soft tissue therapy tools. He received a Master of Fine Arts in Industrial Design in 1988 from the University of Illinois at Urbana-Champaign.

[23] Prof. Visser was qualified, without objection, as an expert in industrial design, including the design of flexible furniture, as well as a wide variety of products, including those made of flexible materials, such as folded paper, felt, rubber, plastics, and sheet metal.

[24] Each expert prepared three reports, which were admitted into evidence without objection and taken as read. Mr. Hatch prepared an initial report dated March 20, 2023, addressing construction and infringement [Hatch First Report]; a further report dated May 10, 2023, addressing validity and responding to Prof. Visser on issues of construction and validity [Hatch Second Report]; and a reply report dated May 24, 2023, responding to Prof. Visser's report on construction and infringement [Hatch Third Report]. Prof. Visser prepared an initial report dated

March 20, 2023, addressing construction and validity [Visser First Report]; a further report dated May 10, 2023, addressing the *Gillette* defence and infringement and responding to the Hatch First Report [Visser Second Report]; and a reply report dated May 24, 2023, responding to the Hatch Second Report [Visser Third Report].

[25] Overall, I found that each of the experts sought to convey their expertise objectively and to assist the Court in understanding the field of industrial design and the ’927 Patent in particular. While the cross-examination of each expert revealed limitations and weaknesses in their evidence, this I not a case where I consider that the evidence of one expert should be entirely preferred over the other. That said, as discussed in further detail below, I found that some of the opinions of Mr. Hatch were not well supported and were at times inconsistent with the patent, other aspects of his own opinions, or physical realities. Ultimately, the combined evidence of the two experts helped put the Court in the position to make its own determinations on the relevant legal issues from the perspective of the skilled reader of the ’927 Patent.

C. *Physical Evidence*

[26] In addition to the testimony and reports of the foregoing witnesses, the parties filed a variety of documentary and other exhibits. These included physical samples of the Chanel products said to infringe the ’927 Patent, Molo’s softwall and softblock products said to embody it, and other articles incorporating honeycomb paper said to form part of the prior art or demonstrate its nature: Exhibits 11–14, 45–46, 58–59, 61–67, 70–73, 78–79, 131–136. These physical exhibits, often accompanied by demonstrations in the Courtroom, assisted the Court in understanding the nature of the various products and their properties.

IV. Analysis

A. *The* Gillette *Defence*

[27] If a defendant's product is the same as, or not patentably distinct from, a product in the prior art, then the defendant cannot be infringing a valid patent: either the patent does not cover the defendant's product or, if it does, it must also cover the prior art and be invalid as lacking novelty: *Western Oilfield Equipment Rentals Ltd v M-I LLC*, 2021 FCA 24 at paras 75–76, citing *Gillette* at p 480 and *JK Smit & Sons, Inc v McClintock*, 1939 CanLII 50 (SCC), [1940] SCR 279 at p 286. This principle allows a defendant to respond to an allegation of infringement by asserting a "*Gillette* defence," *i.e.*, that it is simply practicing the prior art, and therefore cannot be liable regardless of any issues of construction or validity.

[28] As Justice Locke of the Federal Court of Appeal has noted, the *Gillette* defence may permit the defendant, and the Court, a "shortcut" around the steps of construing the claims of a patent, and then determining whether the claims are valid and infringed: *Western Oilfield* at para 77. At the same time, where the Court needs to address issues of construction and validity in any event, there may be little practical value in addressing the *Gillette* defence, since no "shortcut" has been achieved: *Western Oilfield* at paras 78–79. Indeed, it may sometimes be preferable not to take the shortcut: *Western Oilfield* at para 79.

[29] Chanel argues the paper elements used in the Chanel window displays associated with the SS21 Act 1 collection were simply honeycomb tissue paper blocks that are not patentably distinct from the prior art, including honeycomb tissue paper blocks products offered by Fest-

Dekor and Molo's own prior publications. It argues the *Gillette* defence applies to require Molo's claim to be dismissed, regardless of how the construction issues might affect the infringement or invalidity analyses.

[30] However, in addition to defending Molo's claim, Chanel and Procédés Chénel have each brought counterclaims seeking declarations that the claims of the '927 Patent asserted by Molo are invalid. Those counterclaims are not dependent or conditional on the outcome of Molo's infringement claim. To determine the counterclaims, the Court must determine whether the asserted claims are valid, which requires the Court to construe those claims.

[31] As a result, consideration of the *Gillette* defence would ultimately be "superfluous and unnecessary," adding an analytical step rather than creating a beneficial shortcut: *Western Oilfield* at para 79. I will therefore address the usual issues of construction, infringement, and validity of the'927 Patent, rather than embarking on a comparison of Chanel's product to the prior art in the context of its *Gillette* defence. I note that Chanel's anticipation and obviousness arguments raise the same prior art it raises for its *Gillette* defence, such that some of the same issues arise in any case.

B. *Claims Construction*

(1) Principles

[32] The claims of a patent define the monopoly granted to the inventor: *Patent Act*, RSC 1985, c P-4, s 27(4). How the claims are interpreted or construed therefore affects the scope of the monopoly, which may in turn affect whether the claims are valid and/or infringed.

[33] The general principles governing claims construction in Canada have remained fairly constant since they were established by the Supreme Court of Canada in the companion cases of *Free World Trust v Électro Santé Inc*, 2000 SCC 66 and *Whirlpool Corp v Camco Inc*, 2000 SCC 67. These cases, and the subsequent cases of the Federal Court of Appeal that have interpreted and applied them, set out the following relevant principles:

a) Patent claims are construed through the eyes of a person of ordinary skill in the art [POSITA], in light of their common general knowledge [CGK], as of the date the patent is published: *Free World Trust* at paras 31(e), 51, 53; *Whirlpool* at para 55; *Tearlab Corporation v I-Med Pharma Inc*, 2019 FCA 179 at para 32.

b) The Court must adhere to the language of the claims, which promotes fairness and predictability, but this claim language is to be read in an "informed and purposive" way: *Free World Trust* at paras 31(a)–(c), 39–40; *Whirlpool* at paras 49(e)–(g), 52, 54; *Tearlab* at para 31.

c) Purposive construction involves looking at and understanding the words and terms used in the claims in the context of the whole patent specification, including the disclosure and

the claims. While the claims are to be read and understood in the context of the disclosure, the disclosure should not be used to enlarge or contract the scope of the claim as written: *Whirlpool* at paras 48, 49(f), (h), 52; *Biogen Canada Inc v Pharmascience Inc*, 2022 FCA 143 at paras 71–73; *Tetra Tech EBA Inc v Georgetown Rail Equipment Company*, 2019 FCA 203 at paras 86, 104, leave to appeal ref'd 2020 CanLII 27687 (SCC); *Tearlab* at para 33; *ViiV Healthcare Company v Gilead Sciences Canada, Inc*, 2021 FCA 122 at paras 57–60.

d) The language of the claims is to be read with a mind willing to understand and not one desirous of misunderstanding, in the sense the inventor is presumed to have intended and sympathetic to accomplishing their purpose, but without resort to extrinsic evidence of the inventor's intent: *Free World Trust* at paras 31(e), 44, 51, 61–67; *Whirlpool* at paras 49(c), (f); *Tearlab* at para 31.

e) The claim language, purposively construed, will show that some elements of the claimed invention are essential while others are non-essential. The main purpose of claims construction is to identify these essential elements: *Free World Trust* at paras 31(e), 51–60; *Whirlpool* at paras 45–48; *Biogen* at para 74.

f) Claims construction is undertaken before considering infringement or validity, and a single construction is to be adopted for all purposes without regard to whether the construction will affect those issues: *Whirlpool* at paras 43, 49(a)–(b); *Tearlab* at para 34.

g) Specific principles guiding claims construction may apply, such as the presumption that different claims and/or claim elements are not redundant but have distinct and useful meanings (the presumption of claim differentiation), the presumption that the same word

> is to be given the same meaning throughout the claims (the presumption of claim consistency), and the corollary presumption that different words have different meanings. These presumptions are rebuttable where a purposive construction of the claim language requires: *Whirlpool* at para 79; *Tetra Tech* at paras 113–115; *Nova Chemicals Corporation v Dow Chemical Company*, 2016 FCA 216 at paras 82–83, leave to appeal ref'd 2017 CanLII 21418 (SCC); *Seedlings Life Science Ventures, LLC v Pfizer Canada ULC*, 2020 FC 1 [*Seedlings (FC)*] at para 75, aff'd 2021 FCA 154 [*Seedlings (FCA)*] at paras 18–21, 32; *Ratiopharm Inc v Canada (Health)*, 2007 FCA 83 at para 33.

[34] With respect to the principle summarized at letter (c) above, Molo submits that it is an error to refer to the disclosure of the patent unless the language of the claims is itself ambiguous. This argument has support in cases such as *Mylan Pharmaceuticals ULC v Eli Lilly Canada Inc*, 2016 FCA 119 [*Mylan Tadalafil*] at para 39, *Tetra Tech* at para 103 and, arguably, *Tearlab* at para 33. However, my reading of the most recent cases of the Federal Court of Appeal is that they recognize and reiterate that claims construction is always undertaken in the context of the patent as a whole, and that the disclosure "must be considered when construing claims," even for words "that would appear at first glance to be simple and unambiguous when reading only the claims": *Biogen* at paras 71–73; *Western Oilfield* at paras 15–16; *ViiV Healthcare* at para 58; *dTechs EPM Ltd v British Columbia Hydro and Power Authority*, 2023 FCA 115 at paras 69–70, 81. This, to my understanding, is consistent with the general approach to construction set out in *Whirlpool* and *Free World Trust*, and the rejection in *Whirlpool* of a "plain and unambiguous meaning" approach to claims construction in favour of purposive construction: *Whirlpool* at paras 40, 49(f), (g), 52.

[35] Of course, this is not to abandon the language of the claims in favour of the disclosure, or to permit a rewriting of the claims based on the discussion set out in disclosure: *Whirlpool* at para 52. That would go beyond purposive construction. It is simply to recognize that the words and terms used in the claims of a patent must be purposively understood in their context, which includes the patent as a whole.

[36] In any event, the disputed terms of the ’927 Patent are not unambiguous in the sense that the POSITA reviewing them in light of the CGK would readily understand them without consideration of their context as set out in the disclosure. Indeed, both experts referred to the disclosure in their construction of the claims, to understand what the inventors intended to convey through the language set out in the claims. In my view, they were right to do so.

(2) The person of ordinary skill in the art

[37] At the outset of the ’927 Patent, under the heading “Field of the Invention,” the inventors state that “[t]he present invention relates to partitions”: ’927 Patent, para 1. Based on this reference, and the discussion of partitions in the disclosure, Molo argues that the technical field of the patent is partitions in particular, and not the broader field of furniture, even though the claims refer to an “article of flexible furniture.” It argues the field of the invention is determined by the disclosure and not by the claims, citing *E Mishan & Sons Inc v Supertek Canada*, 2014 FC 326 [*Supertek*] at paras 26–27, 71, 137–139, aff’d 2015 FCA 163.

[38] I disagree. I do not read *Supertek* as establishing, either explicitly or implicitly, a rule that the technical field of a patent is defined exclusively by the disclosure and not its claims. Rather,

Justice Hughes was noting that despite narrower claims limited to water hoses, the patent disclosure in that case expressly referred to hoses being used to transport gases, an issue that became relevant, in particular, to assessing differences with a prior art reference to a gas hose: *Supertek*, at paras 26–27, 137–143. In my view, it would be absurd to conclude that the field of an invention does not take into account the very claims that set out "the subject-matter of the invention for which an exclusive privilege or property is claimed": *Patent Act*, s 27(4). As discussed in detail below, the claims of the '927 Patent are directed to an article of *flexible furniture* including a *partition*.

[39] There is also no evidence before me that "partition design" exists as a narrow field of art distinct from the industrial design of other furniture, such that a partition designer might view their field as independent from, and uninfluenced by, other furniture design. To the contrary, as discussed below, both experts described the person skilled in "the art" of the '927 Patent as being someone having skill and experience in furniture design, with neither saying that the POSITA's skill, knowledge, or experience would be limited to partitions to the exclusion of other furniture: Hatch First Report, para 18; Visser First Report, para 35.

[40] I therefore agree with Prof. Visser that the field of the '927 Patent is that of furniture, and in particular the industrial design of furniture, and not simply that of "partitions": Visser First Report, paras 31–34. That said, defining the field as "furniture" or "partitions" does not ultimately affect the identification of the POSITA, an assessment of their CGK, or the construction, infringement, and validity issues discussed below.

[41] The experts agree that the ’927 Patent is directed to someone with training and experience in the area of industrial design, and in particular furniture design. Mr. Hatch considered that person would have a bachelor’s degree in industrial design or mechanical or industrial engineering, with two to three years’ experience designing or manufacturing products such as partitions and furniture using a variety of materials: Hatch First Report, para 18. Prof. Visser considered they would have a university degree in architecture, industrial design, or a related field, with about two years’ experience in designing furniture and/or partitions: Visser First Report, para 35. While Mr. Hatch disagreed with Prof. Visser that the POSITA would include an architect (a possibility Prof. Visser may have included in recognition that the inventors are themselves architects), nothing material turns on this disagreement: Hatch Second Report, para 17; Visser Second Report, para 52.

[42] I accept the experts’ view that the skilled reader of the POSITA is, in essence, an industrial designer with training and experience in the design of furniture and partitions in particular.

(3) The common general knowledge of the POSITA

[43] The CGK is what is generally known and accepted without question by the bulk of those who are engaged in the particular art. It does not include all information available to the POSITA, or even all information that may be obtained through a reasonably diligent search. Rather, it is limited to the “common stock of knowledge relating to the art” of the POSITA. It is thus a subset of the knowledge that makes up the “prior art” or the “state of the art”: *Gemak Trust v Jempak Corporation*, 2022 FCA 141 at paras 93–100, citing *British Acoustic Films LD v*

Nettelfold Productions (1936), 53 RPC 221 at p 250; *Mylan Tadalafil* at paras 23–25; *Hospira Healthcare Corporation v Kennedy Trust for Rheumatology Research*, 2020 FCA 30 at para 84, leave to appeal ref'd 2020 CanLII 102984 (SCC).

[44] The CGK must be considered at the relevant date, since the POSITA's knowledge may change over time and they are "reasonably diligent in keeping up with advances in the field": *Whirlpool* at para 55. For issues of construction, the relevant date is the date of publication of the patent, in this case September 18, 2006. For issues of obviousness, the relevant date is the priority date, in this case May 18, 2005. Neither party asserted that there was a relevant difference in the CGK of the POSITA between these dates: Visser First Report, para 85.

[45] The experts agreed on some aspects of the CGK of the POSITA and disagreed on others, notably the extent to which collapsible lattice or honeycomb structures would have been part of the CGK.

[46] Both experts recognized that the POSITA would be familiar with various types of rigid and flexible partitions, including fixed and moveable partitions: Hatch First Report, paras 28–29; Visser First Report, paras 39–62; Visser Second Report, paras 53–54. Mr. Hatch and Prof. Visser gave examples of known partitions that are (a) permanently fixed in a particular spot and in a given size and structure, like a semi-transparent room divider or a decorative concrete block partition; (b) fixed in a particular spot but expandable or retractable, like an "accordion" room divider common in office spaces or a curtain divider in a hospital room; or (c) fully portable, such as partition systems used to create or subdivide spaces at trade shows or decorative folding

screens. Prof. Visser referred to the second and third categories as “moveable” partitions, with portable partitions being a subset of moveable partitions.

[47] The experts also agreed that the POSITA would be familiar with the properties of various materials used in partitions and furniture, including rigid materials such as glass and wood, and flexible materials such as paper, cardboard, or fabric: Hatch First Report, paras 18, 29, 32–34; Visser First Report, paras 40–47; Visser Second Report, paras 54, 56. The experts each specifically recognized that the CGK of the POSITA would include knowledge regarding the properties of paper and how the strength and rigidity of paper may be affected by folding, each giving the example of a folded piece of paper standing on its edge: Hatch First Report, para 32; Visser First Report, para 64.

[48] However, Mr. Hatch disagreed with Prof. Visser’s opinion that the POSITA would be familiar with items with lattice structures and methods of making them, and considered that Prof. Visser improperly conflated “hexagonal honeycomb structures” with “lattice structures.”

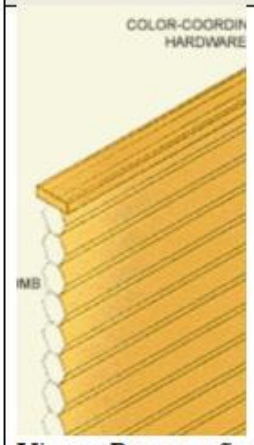
[49] Prof. Visser included in his discussion of the CGK information about honeycomb lattice structures, including the honeycomb tissue paper commonly used to make festive decorations. As illustrative examples, he referred to Christmas decorations and greeting cards that are stored flat and then unfolded in a circular manner to form three-dimensional shapes such as a bell, a ball, or a tree. Such honeycomb tissue paper can be seen at the top and bottom of the greeting card below, which Prof. Visser dates from around 1940. Prof. Visser opined that furniture made with such honeycomb structures was also known as part of the CGK at the relevant time, providing an

example of a honeycomb lamp, also depicted below, apparently seen on a website dating from 2004.

[50] It is common ground that honeycomb paper of this sort is made by gluing sheets of paper together with lines of adhesive that are offset at regular intervals. When pulled apart, the sheets stick together at the glue lines and draw apart where not glued, creating the lattice structure seen in the pictures above. According to Ms. Forsythe, such paper has been around "for hundreds, if not thousands of years": Transcript, p 127–128; see also Visser First Report, Appendix 43.

[51] Prof. Visser's discussion of the CGK also referred to honeycomb structures being used in collapsible window shades, referring to a product sold since the 1980s by the company Hunter Douglas known as Duette Honeycomb Shades: Visser First Report, paras 63–75. The following table from Mr. Hatch's responding report shows excerpts from the illustrations of these blinds in Prof. Visser's report:

Table 6. Window blinds demonstrate an exception to the use of a hexagonal honeycomb

 Visser Report, figure 24 (page 26)	 Visser Report, figure 26 (page 27)	 Visser Report, figure 27 (page 27)

[52] Mr. Hatch recognized that the POSITA may have encountered decorative ornaments made with honeycomb paper as a layperson, but contended they would not have been familiar with methods of making either the paper or such ornaments, and would not think to look to decorative ornaments or window shades when tasked with creating a partition: Hatch Second Report, paras 19–22. He similarly recognized that the POSITA would have been aware of hanging blinds using a hexagonal honeycomb structure, but asserted that they would be unlikely to use these as a reference when designing a freestanding partition: Hatch Second Report, paras 39–41.

[53] Having reviewed the evidence, I conclude that the CGK of the POSITA would include knowledge of both the existence of honeycomb paper and its use in festive decorations. Mr. Hatch recognizes that the POSITA may have been aware of these matters "as a layperson." While the CGK is generally considered in the context of the particular field—the "common stock of knowledge relating to the art"—I do not understand the hypothetical POSITA to be so

exclusively focused on their own art that they are unaware of the common knowledge of those who are not skilled in the art. The hypothetical "person of ordinary skill in the art" is, among other things, a person. If the average layperson has a particular body of common knowledge, there is no reason to exclude that knowledge from the CGK of the POSITA simply because they are *more* knowledgeable in their particular art. Usually, such knowledge is not particularly relevant to the construction or assessment of a patent. But where it is, the fact that knowledge is not *exclusively* held by the POSITA does not bring it outside the CGK.

[54] Beyond this, both experts agreed the POSITA of the '927 Patent would have particular knowledge with respect to the physical properties of rigid and flexible materials, including paper and the "cuts, folds, and bonds" of paper products: Hatch First Report, paras 3, 18, 21, 32–36; Visser Second Report, paras 53–58. Indeed, Mr. Hatch himself recognizes that the POSITA would have knowledge of (a) how materials, including paper materials, could be formed in manufacture, assembled, bonded, and finished; (b) common techniques used in the manufacture of mass-produced products; (c) the general principles of production techniques used in the manufacture of products utilizing flexible materials; (d) how to create products by combining parts of similar or different materials; (e) methods of bonding, including glue and glue strips; (f) commonly used technologies and methods to fold paper products, including those made of tissue paper; and (g) how cuts, folds, and creases can be applied in manufacture and how to design the machinery to do so. With this focused knowledge and interest with respect to paper products and their properties, well beyond that of the layperson, it is in my view inconsistent to suggest that the POSITA would somehow be unaware of a common mass-produced form of

paper material such as honeycomb paper, or that their common knowledge would not include a basic understanding of how it is made.

[55] With respect to the use of lattice structures in furniture in particular, there are certainly several examples in the evidence of furniture with lattice structures dating from before May 2005, including the "Honey-Pop Chair" made of honeycomb parchment paper in 2001 by designer Tokujin Yoshioka, which is also in the collection of the MoMA (Exhibits 47, 81), and the "K-Bench" designed by Charles Kaisin in 2002, made of an expandable honeycomb polypropylene material (Hatch First Report, Appendices 36–38). I conclude that whether such structures would be in the CGK of the POSITA is ultimately not material, as they form part of the prior art or state of the art for purposes of the obviousness analysis.

[56] Mr. Hatch also sought to draw a distinction between the lattice structures of honeycomb paper and those that have hexagonal honeycomb structures. The former have thin lines of adhesive and thus have cells that are more diamond-shaped; the latter have a greater degree of adhered overlap (*i.e.*, thicker lines of adhesive), and therefore have cells that are more hexagonal in shape: Hatch Second Report, paras 23–35; Transcript, pp 1061–1067. Mr. Hatch considered that the POSITA would understand there are considerable mechanical and structural differences between the two, such that they would view them as distinct from each other.

[57] Mr. Hatch asserted that the thicker lines of adhesive mean that hexagonal honeycomb structures gain greater strength from the wider doubled area, and that they involve a "sharp bend" of the sheet away from the adhesive. He contrasted this with sheets in a lattice structure

such as honeycomb paper, which he described as flexing and curving rather than bending: Hatch Second Report, paras 29–30. In Mr. Hatch's opinion, the POSITA would know that hexagonal honeycomb structures are therefore less flexible than lattice structures: Hatch Second Report, para 33. Mr. Hatch considered that the cell shapes of both the Hunter Douglas window blinds and the K-Bench showed a hexagonal honeycomb structure rather than a lattice structure: Hatch Second Report, paras 38–39.

[58] I agree with Prof. Visser that Mr. Hatch's asserted distinction between these types of lattice is arbitrary and unsupported. The distinction between what Mr. Hatch refers to as a hexagonal honeycomb structure and a lattice structure is essentially the width of the overlap between the sheets, *i.e.*, the width of the glue lines: Hatch Second Report, para 31; Visser Third Report, paras 9–11: Transcript, pp 1151–1152, 1066–1067. However, as Prof. Visser demonstrates, any non-zero-width glue line effectively gives the resulting cell of the lattice six sides: two sides where the sheet is glued to its neighbours, and four sides where it is not. The width of the glue lines effectively defines whether the cell of a lattice is an irregular hexagon closer in appearance to a diamond (thin glue lines), an irregular hexagon that has more pronounced sides (thicker glue lines), or a regular hexagon (glue lines that occupy 25% of the overall width of the sheet): Visser Third Report, paras 11, 14 (Figures 1 and 2). Mr. Hatch provided no authority or compelling explanation for why the POSITA would consider some of these lattices as categorically different from others or where the lines between the categories would lie. Indeed, Mr. Hatch recognized that the POSITA would refer to them all as "honeycomb": Transcript, p 1063.

[59] As for the question of "sharp bends," whether the material bends sharply away from the glue lines or is more curved depends on how far apart the sheets are stretched and the nature of the material, not the thickness of the glue line, as Mr. Hatch himself notes: Hatch Second Report, para 47; Transcript, p 1065; Visser Third Report, para 19. In this regard, I consider that Mr. Hatch's illustration of the asserted differences between the "sharp bends" of the hexagonal honeycomb structure and the "gentle curving" of the lattice structure does not helpfully reflect the physical reality of the two examples or conduct an apples-to-apples comparison of them: Hatch Second Report, para 31.

[60] The arbitrariness of Mr. Hatch's distinction is illustrated by his categorization of the K-Bench as having a "hexagonal" honeycomb and not a lattice structure. The images of the K-Bench show it has strips of adhesive, and a lattice structure, similar to those in some of Mr. Hatch's examples of non-hexagonal lattice structures: Visser Second Report, para 27; Visser Third Report, para 16; Hatch Second Report, paras 28, 38, 198(a). Like the other lattice structures, the K-Bench effectively shows cells that are an irregular hexagon, with sides that are either slightly curved or straighter, depending on how far apart they have been pulled. Thus, while I agree the POSITA would understand that changing aspects of a honeycomb structure, including the material used and thickness of the glue lines, could affect its properties, including its strength, its flexibility, and the extent to which it can be expanded, the POSITA would not divide such structures into separate categories of "hexagonal honeycomb" and "lattice structures."

[61] Having identified the POSITA and their CGK, I turn to the '927 Patent itself and how the POSITA would understand it.

(4) The disclosure of the ’927 Patent

[62] As noted above, the inventors state that the invention set out in the ’927 Patent relates to partitions, which they describe as being used to “subdivide spaces, or create more intimate spaces.” The inventors identify shortcomings of prior art partitions, said to be typically rigid, large, heavy, and/or cumbersome, and limited in the extent to which they can be extended, contracted, or reshaped. They note that particularly when one wants to subdivide space on a temporary basis, such as for temporary sleeping or meeting space, or a display space at a trade show or in a retail window, the rigid, heavy, and/or cumbersome partitions of the prior art may be costly to transport, difficult to set up, take down, and store, and may constrain how the space can be partitioned. The invention seeks to provide a partition that obviates or mitigates these disadvantages.

[63] The inventors provide the following summary of the invention, or at least one aspect of it:

> According therefore to one aspect of the present invention there is provided a partition having a plurality of laminar panels formed from a flexible flaccid material. Each panel has a pair of oppositely-directed major faces with faces of adjacent panels being inter-connected to provide a lattice structure upon movement of the faces away from each other. Each one of a pair of supports is provided at opposite ends of the partition connected to respective ones of the faces. The supports are self-supporting to provide rigidity to the partition. In this way, the supports may be moved apart to expand the lattice and extend the overall length of the partition.

[64] The patent sets out a detailed description of an embodiment of the invention with reference to a series of nine drawings. Of these, Figures 1, 2, 3, and 5 are of particular relevance.

[65] Figure 1 shows a front perspective view of a partition:

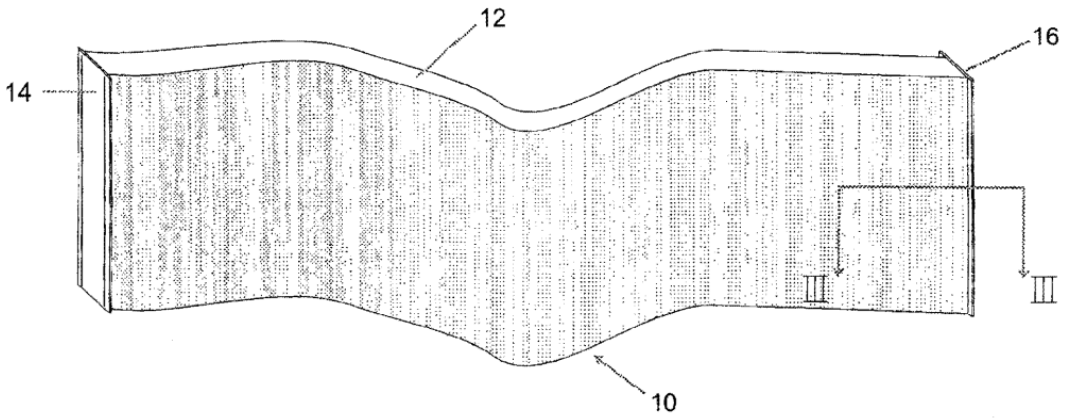


FIG 1

[66] Referring to this figure, the disclosure describes the partition (labelled 10) as comprising a core (labelled 12) and a pair of supports (labelled 14 and 16) at opposite ends of the core. In language that might only be found in a patent, the core is described as being formed from a plurality of panels that "each have a pair of oppositely-directed major faces," *i.e.*, each panel has two sides, like a sheet of paper. The panels are formed from a "flexible flaccid material." In the preferred embodiment, this is standard white, flame retardant tissue paper.

[67] Adjacent panels are inter-connected to one another at spaced intervals that alternate across the width of the face of the panel through a series of parallel, laterally-spaced strips of adhesive, as shown in Figures 2 and 3:

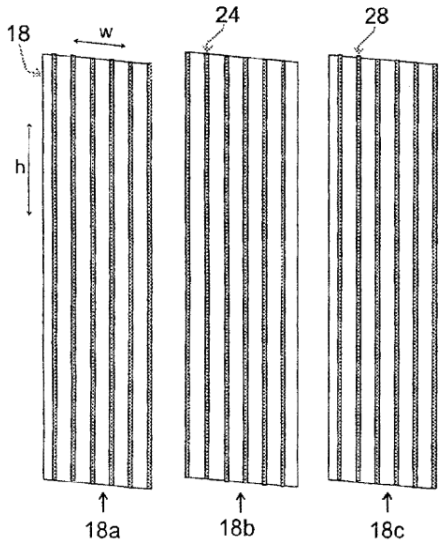


FIG 2

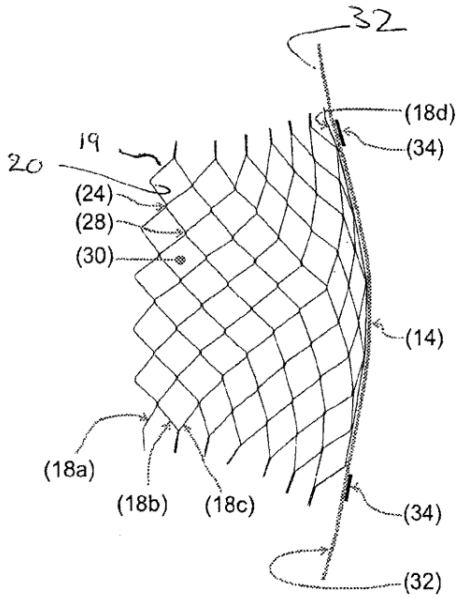


FIG 3

[68] Figure 2 shows three of the panels (labelled 18a, 18b, and 18c), each of which has parallel strips or stripes (the patent uses both terms) of adhesive running vertically the full height of the panel. The adhesive stripes on panel 18b (labelled 24) are offset from those on panels 18a and 18c (labelled 28). The result is seen in Figure 3, which shows a top view of the cross-section indicated with the Roman numeral III in Figure 1: when the panels are extended horizontally (*i.e.*, pulled apart), the panels form a lattice structure with voids (labelled 30). The location of the offset adhesive stripes (again labelled 24 and 28) can be seen in Figure 3, as can the "oppositely-directed major faces" of the sheets (labelled 19 and 20).

[69] Figure 3 also shows one of the supports (labelled 14). The disclosure states that an end panel of the core (labelled 18d) is connected to the support over its entire width, and that the supports are made "from a self-supporting material, typically a non woven felt material which has a degree of flexibility but also has sufficient rigidity to resist collapse of the core." A pair of hook and loop strips, such as that sold under the brand name Velcro (labelled 34) is stitched to the felt supports, extending vertically from one end to the other. The core is described as being collapsible, so that the partition can be stored in a flat, collapsed position. When required, the supports can be used to manipulate the partition: moving them away from each other results in the core being expanded to open the lattice within the core.

[70] The supports can be folded vertically by bringing opposite edges of the supports together, to provide enhanced rigidity at each end of the partition. The hook and loop strips engage and hold the support in a "folded tubular configuration," accommodated by the flexible nature of the lattice, as seen in the two parts of Figure 5:

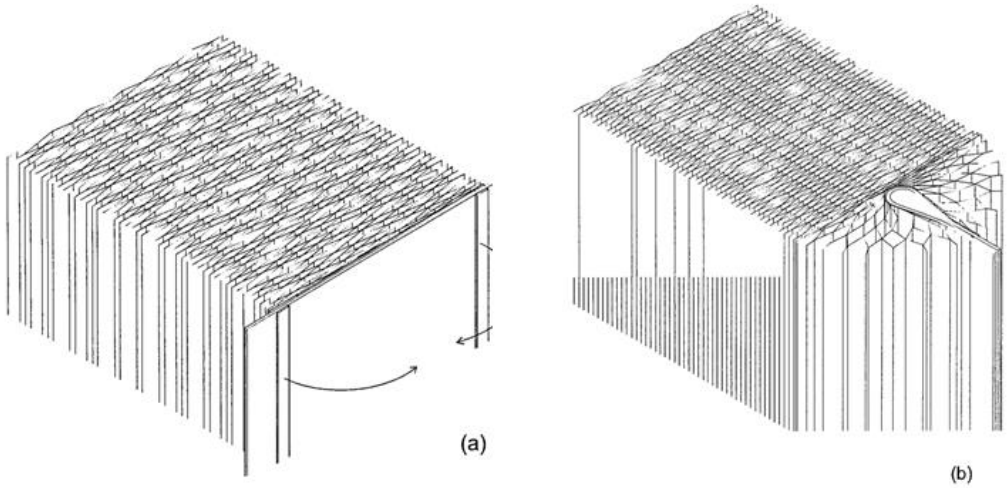


FIG 5

[71] The inventors note that with the partition expanded, it has sufficient width to remain stable in a vertical position with the rigidity provided by the end supports. The flexibility of the core accommodates adjusting the extended partition to different configurations, such as curves, and different dimensions.

[72] The remainder of the disclosure proposes variations and uses of the partition, including (i) using a partition of a lower height to display objects; (ii) using the end of the void to hold a container such as a vase; (iii) joining two partitions by connecting their supports via the hook and loop strips; (iv) using other materials instead of paper for the core, such as a non-woven textile material (*e.g.*, the plastic sold as Tyvek), or paper laminated with plastic, or using opaque or different coloured materials; (v) using supports made of felt or a "material similar to the core material but with increased thickness"; and (v) adjusting the dimensions of the void by adjusting the spacing and/or width of the adhesive stripes.

(5) Claim 1

[73] Molo asserts that Chanel and Procédés Chénel have infringed Claims 1–3, 5–7, and 13–17 of the '927 Patent [the Asserted Claims]. As Chanel and Procédés Chénel only assert by counterclaim the invalidity of the Asserted Claims, only these claims are in issue in this action.

[74] Claim 1 is the only independent claim. It reads as follows, with terms discussed below underlined:

> 1. An article of flexible furniture including a partition having a core formed from a plurality of laminar panels of a flaccid material and each panel having a pair of oppositely directed major faces, adjacent faces of said panels being inter-connected to provide a lattice structure upon movement of abutting faces away from each other, a pair of supports at opposite ends of said core and connected to respective ones of said faces, said supports being self-supporting to provide rigidity to said core to provide a freestanding wall whereby said supports may be moved apart to expand said lattice and extend the length of said partition.

[75] It is clear from the general structure of Claim 1 that it claims an article of *flexible furniture* including a *partition*, the *partition* having two main features: a *core* formed from *laminar panels*, and a *pair of supports* each connected to one of the faces of the *core*. The claim describes how the *core* is formed from the *laminar panels*, which are connected so they make a *lattice structure* when pulled apart. It also describes the *pair of supports* as being *self-supporting* to provide *rigidity* to the *core* to provide a *freestanding wall*.

[76] Each expert concluded that the POSITA would consider all of the elements claimed in Claim 1 to be essential: Hatch First Report, para 53; Visser First Report, para 108; Transcript, pp 579–581, 778. The disagreement between the parties and the experts was on how a POSITA would understand those essential elements, particularly as they relate to the *pair of supports*.

[77] Before turning to the construction of the specific terms in Claim 1, it is important to underscore that Claim 1 is a claim to an article or apparatus, *i.e.*, a physical object. Claim 1 refers to the article having a particular function: it is a *partition* that can form a *freestanding wall*. However, it is not a use claim (*e.g.*, a claim to "the use of X as a partition") or a method claim (*e.g.*, a claim to "a method of partitioning space using X"). The parties therefore agree that Claim

1 is a claim to an article, rather than to a particular use, such that a given article will fall within the scope of the claims or it will not, regardless of whether it is used or intended to be used for the purpose described in the patent or, indeed, whether it is ever used at all: Transcript, pp 1424–1425, 1445–1446, 1455, 1498–1499. The inventors chose to define the subject matter of the invention for which they claimed an exclusive privilege in terms of the characteristics of an article, rather than a particular use being made of that article: *Patent Act*, s 27(4). The construction of the claims, as well as their infringement and validity, must be assessed in accordance with that choice.

(a) An article of *flexible furniture* including a *partition*

[78] As each expert noted, the term *flexible furniture* only appears in the claims of the ’927 Patent and not in its disclosure. While the disclosure refers to partitions, Claim 1 claims “[a]n article of *flexible furniture* including a *partition*.” The experts agreed that the POSITA would understand the phrase to refer to something moveable and changeable that is capable of subdividing space. However, they differed on aspects of the term.

[79] In Mr. Hatch’s view, the POSITA would understand that the patent is for a “flexible partition,” which would be considered in the design industry as furniture. He tied the notion of a *partition* to that of a *freestanding wall* appearing later in the claim, suggesting the terms are used interchangeably: Hatch First Report, paras 54–55. He therefore considered that the POSITA would understand the phrase “article of *flexible furniture* including a *partition*” to mean a wall that is capable of subdividing space, with a wall meaning a “continuous vertical structure,” and in particular one that is “long and taller than it is wide”: Hatch Second Report, paras 45, 109 and

Exhibit KK; Transcript, pp 626–627. Mr. Hatch considered Prof. Visser's construction—"a moveable and changeable structure capable of subdividing a space" [emphasis added]—to be too broad as it does not incorporate the notion of a wall: Visser First Report, para 109 (p 37); Hatch Second Report, para 45; Transcript, p 1068.

[80] I agree with Chanel that the language of Claim 1 is not limited to articles of furniture that are themselves partitions or walls. As Chanel notes, the inventors chose not to limit their claim to "a *partition*," but adopted the broader language of "an article of *flexible furniture* including a *partition*" [emphasis added]. On its face, the term "including" could potentially mean either "an article of *flexible furniture* including but not limited to a *partition*" (*i.e.*, an article of furniture that could be a partition or could be something else) or "an article of *flexible furniture* that includes a *partition*." In the context of the '927 Patent, which is expressly directed to partitions, the POSITA would understand it to have the latter meaning, namely that the claim is directed to a piece of *furniture* that is or includes a *partition*, and would not include a piece of *furniture* that is not or does not include a *partition*. As the experts agree, the POSITA would consider the patent's description of a *partition* as something used to "subdivide spaces" to be consistent with their understanding of partitions: Hatch First Report, para 27; Hatch Second Report, para 45; Visser First Report, paras 39, 109 (p 37).

[81] At the same time, I agree with Mr. Hatch that the POSITA would see a connection between the use of the term *partition* and the reference to a *freestanding wall*. In my view, the POSITA reading the '927 Patent purposively and with a mind willing to understand would understand that the inventors were claiming a piece of furniture that includes a *partition* that can

subdivide space when it is stretched to form a *freestanding wall*. The notion of a wall is expressly referred to in Claim 1, as the article of *furniture* must be capable of forming a *freestanding wall*.

[82] I do not agree with Prof. Visser that referring to the article of furniture as a wall conflicts with examples given and shown in the ’927 Patent of a lower height partition (*e.g.*, 0.5 metres) that is used to display objects: ’927 Patent, para 25 and Figure 9; Visser Third Report, paras 24–25. A wall may include a low wall. It would be clear to the reader of the ’927 Patent that the inventors recognized that space can be effectively subdivided even by lower partition walls.

[83] Nor do I agree with Prof. Visser that construing the *partition* of Claim 1 as forming a wall would create an ambiguity, since the patent “does not disclose what is and what is *not* a wall” [emphasis in original]: Visser Third Report, paras 26–31. As discussed further below, while a patent’s claims must be sufficiently precise to allow the POSITA to know what falls within it and what does not, this does not require that common terms that are well-known to the POSITA, such as *partition* and *wall*, must be given precise dimensional restrictions that divide every imaginable structure between those that are *walls* (or *partitions*) and those that are not, with a specific dividing line between them in terms of height, width, length, or even shape. Such an unduly metaphysical approach does not accord with the requirement that the POSITA read the claim purposively and with a mind willing to understand.

[84] A POSITA familiar with the industrial design of furniture, and partitions in particular, would be reasonably able to understand the inventors’ reference to the common terms *partition*

and *wall*, and to assess whether a given object is or is not a *partition* or *wall* that is capable of subdividing spaces. It is worth noting that while the inventors discuss and claim parameters on the height and width of the *partition*, they do not discuss or limit its length, other than to refer to the "desired overall length": '927 Patent, paras 18, 23–25, Claims 14–17. Nonetheless, the POSITA would understand that in order to "subdivide space" in a practical and meaningful way, the dimensions of the *partition* are relevant. The POSITA would recognize that, as the examples in the '927 Patent illustrate, a long low wall may subdivide space and act as a *partition*, provided it is not trivially low. A tall wall that is shorter in length may also subdivide space provided it has at least some reasonable length: the POSITA would recognize that a pillar is not a *partition*.

[85] In this regard, I do not accept Mr. Hatch's suggestion that an article must necessarily be "taller than it is wide" to be a *partition* or *freestanding wall* within the meaning of Claim 1. The '927 Patent suggests that the panels of the *core* may range in height from 0.5 to 3 metres, and in width from 10 to 100 centimeters: '927 Patent, para 18 and Claims 14 to 17. Choosing the lowest and widest of these ranges would yield a partition wall that is half a metre high and one metre wide, *i.e.*, wider than it is tall. The POSITA reading Claim 1 in light of the patent as a whole would not put limitations on the *partition* of the claim that exclude the inventors' own discussion of options absent claim language requiring such exclusion: *Seedlings (FC)* at para 58; *Bristol-Myers Squibb Canada Co v Teva Canada Limited*, 2016 FC 580 at paras 308, 335, 372, aff'd on other grounds, 2017 FCA 76.

[86] This conclusion is confirmed by the dependent claims. Claim 5, discussed further below at paragraphs [147] to [149], requires the voids of the *lattice structure* to be oriented on the

longitudinal axis of the panels, and thus requires the panels (and the *partition* made from them) to be taller than they are wide. The presumption of claim differentiation suggests that Claim 1 does not include this requirement. Similarly, a *partition* half a metre high and one metre wide would fall within the scope of Claim 16 as it depends from Claim 14, discussed further below at paragraphs [152] to [153]; the POSITA would therefore recognize it is not excluded from Claim 1, despite being wider than it is tall.

[87] As noted, the experts agree that the POSITA would consider the article of *flexible furniture* of Claim 1 to be (a) moveable, in the sense of being portable from one location to another; and (b) changeable, in the sense that it can be reshaped: Hatch First Report, para 54; Visser First Report, para 109 (p 37). I adopt Prof. Visser's view that the POSITA would understand that the article is moveable from the use of the term *furniture* and that it is changeable from the use of the term *flexible* and the reference to extending the *partition*: Transcript, pp 778–779. Mr. Hatch suggested that the term *flexible* implied both that the *partition* was moveable and that it was easily reshaped: Hatch First Report, paras 54–55; Transcript, pp 475–477, 496, 520–521, 653–655. In my view, the POSITA would read the term *flexible* as referring only to the physical characteristic of the article as bendable, rather than to it being portable or easy to reposition. The POSITA would note that the inventors only ever use the words "flexible" and "flexibility" to refer to the physical characteristic of bendability rather than the quality of portability: '927 Patent, paras 7, 18, 20, 23, 25, 28, 29 and Claim 2.

(b) having a *core* formed from a plurality of *laminar panels* of a *flaccid material* and each *panel* having a pair of oppositely directed major faces, *adjacent faces* of said *panels* being *inter-connected* to provide a *lattice structure* upon movement of abutting faces away from each other

[88] The parties agree, as do I, that the POSITA would understand the *core* to be made up of multiple sheet-like layers (*laminar panels*) whose *adjacent faces* are *inter-connected* in such a way that they form a *lattice structure* when pulled apart, as in honeycomb tissue paper: Hatch First Report, paras 56–61; Visser First Report, para 109 (pp 38–41). As Prof. Visser notes, the term "each *panel*" clearly refers to each *laminar panel* and not to the *partition* as a whole, which is the other way the term *panel* is used in the '927 Patent: Visser First Report, para 109 (pp 39–40); '927 Patent, paras 12, 14–17, referring to Figures 4, 6–9.

[89] The POSITA would understand that the *laminar panels* could be *inter-connected* in the way described in the '927 Patent, namely by using offset alternating stripes of adhesive, as shown in Figures 2 and 3. This yields a vertical *lattice structure* when the *laminar panels* are pulled apart: Hatch First Report, paras 61, 64, 68–72; Visser First Report, para 109 (pp 40–41). As an aside, it would be clear to the POSITA that if the stripes of adhesive were not offset (*i.e.*, they are all at the same lateral location on the paper), the paper could not be pulled apart at all, and no *lattice structure* could be formed.

[90] The primary disputes between the experts and parties on this aspect of Claim 1 relate to the terms *flaccid material* and *lattice structure*.

(i) *flaccid material*

[91] The *laminar panels* of Claim 1 are made of a *flaccid material*. Mr. Hatch opined that the POSITA would understand the term *flaccid* as synonymous with "flexible," in contrast to material that is rigid, inflexible or brittle: Hatch First Report, paras 57–59; Transcript, pp 476–477. Prof. Visser considered it to mean non-firm material, adding that it could be "bent sharply, even over short lengths": Visser First Report, para 109 (pp 38–39). Each expert disagreed with the others' construction. Mr. Hatch asserted there was no requirement in the claim or the word *flaccid* that the material bend sharply, noting that some of the examples in the patent, like Tyvek or laminated paper, resist sharp bends: Hatch Second Report, paras 46–48. For his part, Prof. Visser viewed "flexible" as overly broad, since not all flexible materials would be suitable for the *core*; flexible materials like thin sheets of metal could not be expanded and collapsed without becoming brittle or breaking: Visser Second Report, para 68.

[92] Having considered the experts' evidence and reading the patent through the eyes of the POSITA, I conclude that neither expert has entirely captured how the POSITA would understand the term *flaccid material*.

[93] In my view, the POSITA would recognize that the inventors did not use the term *flaccid* synonymously with *flexible*, either in the claims or in the patent as a whole. In Claim 1 itself, the article of furniture is *flexible*, but the laminar panels are *flaccid*. Similarly, as discussed further below, Claim 2 requires the *supports* to be *flexible*, such that the *supports* of Claim 1 may be *flexible*, but they must nevertheless provide *rigidity* to the *core* of *laminar panels* of *flaccid material*.

[94] The POSITA would also note that the later dependent claims provide additional limitations that give examples of the *flaccid material*, such as paper (Claim 6), non-woven material (Claims 7 and 8), or a composite of plastic and paper such as plastic-laminated paper (Claims 9 to 11). The dependent claims that include limitations on the *flexible supports* are different, but overlap, referring to a felt panel (Claim 12) or a non-woven material (Claim 13). The POSITA would presume that different words in the patent claim have different meaning, and would see nothing in the claims requiring *flaccid* and *flexible* to be synonymous: *Seedlings (FC)* at para 75. These indicators and examples would suggest to the POSITA that the term *flaccid* means something softer or more pliant than merely *flexible*.

[95] The POSITA would find this understanding confirmed in the disclosure. The inventors refer to the laminar panels as being formed of a "flexible flaccid material," (*i.e.*, both flexible and flaccid) and give examples of tissue paper, Tyvek, or plastic-laminated paper: '927 Patent, paras 7, 18, 28. The POSITA familiar with the properties of such materials would understand that they could be pulled apart to form the desired lattice structure, while panels that are too stiff or rigid would either not open or would tend to retract. Conversely, the supports are described as having "a degree of flexibility but also […] sufficient rigidity to resist collapse of the core" [emphasis added] and as being "sufficiently flexible to allow folding" [emphasis added], with example materials being felt, or material similar to the core but with increased thickness: '927 Patent, paras 20, 28.

[96] Reading the word *flaccid* as used in the claims in light of the patent as a whole, the POSITA would certainly understand that the *flaccid material* of the *laminar panel* is flexible (rather than entirely rigid or inflexible), but they would not understand that all flexible material is

necessarily also *flaccid material*. Both from their CGK and from the patent, the POSITA would know that materials can have varying degrees of flexibility, a notion confirmed by the patent's discussion of materials having a "degree of flexibility" or "sufficient flexibility." Thin sheets of light fabric, paper, laminated paper, cardboard, plastic, felt, leather, and even metal may each have a degree of flexibility. They may therefore all be described as flexible. However, not all of these materials would be considered flaccid. I therefore disagree with Mr. Hatch that the POSITA would understand the term *flaccid* as used in Claim 1 to be simply synonymous with the term *flexible*.

[97] At the same time, I do not believe the POSITA would read the term *flaccid material* as importing any particular requirement that the material "bend sharply" over short distances, as Prof. Visser contends. Nothing in the patent specifies the particular nature of the bend in the *laminar panels* when the sheets are pulled apart. While Figure 3 shows fairly sharp bends in the *laminar panels* at the adhesive stripes, the POSITA would recognize that different materials (tissue paper, paper, Tyvek, laminated paper) might bend more or less sharply while still falling within the inventors' contemplation as *flaccid material*: Hatch Second Report, para 47.

[98] I therefore conclude that the POSITA would construe the term *flaccid material* as material that is sufficiently soft and flexible to be suitable for use in the *laminar panels*, while not encompassing all flexible materials and not requiring that the material bend sharply over short distances.

(ii) *lattice structure*

[99] Mr. Hatch and Molo contend that the *lattice structure* of Claim 1 only encompasses diamond-shaped lattices resulting from thin glue lines, and does not encompass hexagonal honeycomb structures resulting from thicker glue lines: Hatch Second Report, para 51; Transcript, pp 1404–1411. This position is related to Mr. Hatch's view, described above at paragraphs [56] to [60], that the POSITA would view these lattices as being sufficiently structurally and mechanically different to fall into different categories. Mr. Hatch noted that the '927 Patent only refers to *lattice structures*: Transcript, p 1061.

[100] For the reasons given above, I have rejected Mr. Hatch's contention that the POSITA would view "hexagonal honeycomb structures" as being categorically different from "lattice structures." Mr. Hatch points to no evidence indicating that the term "lattice structure" has any specific or separate meaning in the art of industrial design, such that the POSITA would distinguish it from "hexagonal honeycomb structures." The POSITA reading Claim 1 would see the requirement that the *adjacent faces* of the *laminar panels* be *inter-connected* to provide a *lattice structure*. The POSITA reading Claim 1 purposively in the context of the '927 Patent would not impose any particular restriction on the extent or nature of the inter-connection (such as the width of adhesive stripes), beyond the functional limitation that it must allow the *laminar panels* to be pulled apart to form a *lattice* that can be expanded, extending the length of the *partition*. The POSITA would see nothing in the language of Claim 1 that would restrict the *lattice structure* to one in which the cells (or "voids" in the language of the patent) are closer to a diamond shape owing to a narrow glue line and exclude those with a more hexagonal shape owing to a wider glue line.

[101] Further, the POSITA would understand the terms *inter-connected* and *lattice structure* as used in the claims in the context of the inventors' discussion of the invention, and in particular their discussion of the stripes of adhesive that may be used to join the *laminar panels*. The inventors provide no discussion of purported distinctions between lattice structures and hexagonal honeycomb, and do not purport to limit the invention to cells with a particular shape or adhesive stripes of a particular size. To the contrary, they expressly note that the dimensions of the void "may be adjusted to suit particular applications": '927 Patent, para 29.

[102] The inventors also state they had "found in practise" that a spacing between the stripes in the order of 5 to 10 centimetres (when unexpanded, *i.e.*, when the panel is flat) was appropriate and that the width of the stripes is between 1 and 10 millimetres: '927 Patent, para 29. This arrangement is said to provide a flexible structure with extensive elongation to provide maximum functionality. A lattice in which the adhesive stripes are 10 millimetres (1 centimetre) wide would clearly have a visible region of overlap, giving the lattice cell a hexagonal shape. This would particularly be so if the stripes were only 5 centimetres apart: Visser Third Report, paras 12–14; Transcript, pp 797–798. The POSITA would not read Claim 1 to be limited to these illustrative examples in the disclosure, particularly given the inventors' indication that the dimensions of the void may be adjusted to suit particular applications. However, they would certainly not understand Claim 1 to exclude the very illustrative explanations given by the inventors.

[103] I therefore reject Molo's argument that the POSITA would understand the term *lattice structure* as used in Claim 1 to encompass only lattices that have very thin glue lines and

therefore have cells that appear more diamond shaped and exclude those with thicker glue lines and therefore have cells that can be described as more hexagonal.

> (c) a *pair of supports* at opposite ends of said *core* and *connected to* respective ones of said *faces*

[104] Claim 1 requires that the *partition* have a *pair of supports* at opposite ends of the *core*. The claim sets out the *supports* as an element separate from that of the *core*. The *partition* thus has two main elements: the *core* described above and the *supports*.

[105] As the experts agree, the requirement for a *pair of supports* at opposite ends of the *core* means the *core* has one *support* at each end of the *core*: Hatch First Report, para 74; Visser First Report, para 109 (pp 41–42); Transcript, pp 483–484. Each *support* must be *connected to* one of the *faces*, *i.e.*, one of the oppositely directed major faces of the *laminar panels* of the *core*. The requirement that the *support* be at the end of the *core* and that it be *connected to* one of the *faces* of necessity means that it is *connected to* the outer face of the outermost *laminar panel* of the *core*, *i.e.*, what the inventors refer to as the "end panel": Hatch First Report, para 74; Visser First Report, para 109 (pp 41–42).

[106] The POSITA would note that while Claim 1 requires the *support* to be *connected to* one of the *faces* of the *laminar panel*, it does not specify how it is to be connected. In particular, the inventors chose not to include in Claim 1 the description or limitation found in the disclosure that the *support* be *connected to* the end panel "over its entire width": '927 Patent, para 20. The POSITA would therefore not read this limitation from the disclosure into Claim 1, but would recognize that the *support* has to be sufficiently *connected to* the end panel that it provides the *rigidity* to the *core* discussed in the next section.

[107] The POSITA would also not read into Claim 1 the discussion in the disclosure regarding the size of the *support*. The inventors describe and draw the supports as extending laterally beyond the core, as seen with the label 32 in Figure 3 above. However, Claim 1 does not include any dimensional limitation on the *support*.

[108] Rather, the limitations on the *pair of supports* are expressed in functional terms, in the concluding language of Claim 1.

> (d) said *supports* being *self-supporting* to provide *rigidity* to said *core* to provide a *freestanding wall* whereby said *supports* may be moved apart to expand said *lattice* and extend the length of said *partition*.

[109] There is no dispute regarding the second half of this passage. The ability to move the *supports* apart to expand the *lattice* and lengthen the *partition* simply means that when the *supports* are pulled in opposite directions, the *inter-connected laminar panels* form the *lattice structure* described earlier in the claim. This stretches the set of *laminar panels* to form the body of the *partition*: Hatch First Report, para 82; Visser First Report, para 109 (p 43).

[110] The disputes between the parties and the experts lie in the first half of the passage, namely the requirement that the *supports* be "*self-supporting* to provide *rigidity* to said *core* to provide a *freestanding wall*" when the *supports* are moved apart. Two main issues arise: (i) what it means for the *supports* to be *self-supporting* to provide *rigidity* to the *core* to provide a *freestanding wall*; and (ii) how the POSITA would understand that the *supports* provide such *rigidity*.

(i) *self-supporting* to provide *rigidity* to the *core* to provide a *freestanding wall*

[111] On its face, the term *self-supporting* means, and would mean to the POSITA, that the *supports* support themselves, *i.e.*, they stand on their own: Visser First Report, at para 99. However, I agree with the experts that in the context of the ’927 Patent as a whole, the POSITA would not understand that the *supports* need to be *self-supporting* in the sense of being able to stand on their own: Visser First Report, paras 98–100, 109 (p 42); Hatch First Report, paras 73–75. As Mr. Hatch notes, the inventors use the term *self-supporting* distinctly from that of *freestanding*, which the experts agree would be understood to mean “able to stand on its own,” *i.e.*, without assistance from an external structure: Hatch First Report, paras 74–75; Visser First Report, para 109 (pp 42–43). Given the use of different terms, the POSITA would understand that the inventors did not mean *self-supporting* in what might be considered, if the context of the patent were not taken into account, its “plain and unambiguous” meaning: *Whirlpool* at para 52; *Biogen* at para 73.

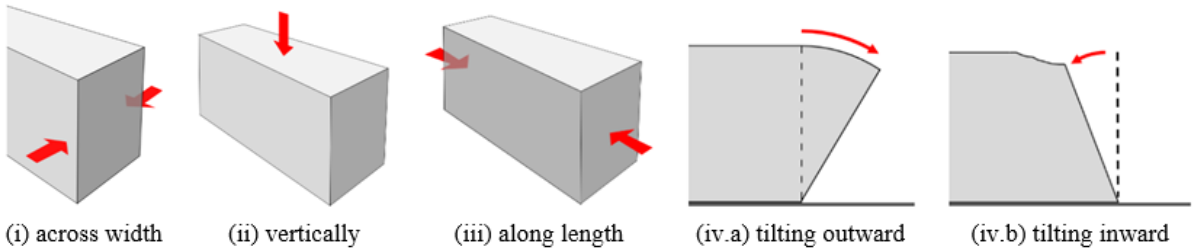
[112] Rather, both Mr. Hatch and Prof. Visser concluded the POSITA would understand the term *self-supporting* to relate to the *rigidity* provided to the *core* by the *supports*: Hatch First Report, para 75; Visser First Report, paras 100, 109 (p 42). Each referred to the inventors’ discussion of the *supports* in the disclosure to inform this construction. In particular, the inventors state at paragraph 7 of the disclosure that the supports are “self-supporting to provide rigidity to the partition,” and at paragraph 20 that the supports “are made from a self-supporting material, typically a non woven felt material which has a degree of flexibility but also has sufficient rigidity to resist collapse of the core.” The inventors’ reference to “sufficient rigidity” underscores that rigidity, like flexibility, is a relative term, and that a material may have both a

degree of flexibility and a degree of rigidity without being entirely flexible or entirely rigid. This would accord with the POSITA's understanding and knowledge of the physical properties of rigid and flexible materials.

[113] Based on the foregoing passages, both experts concluded that the *supports* of Claim 1 must provide sufficient *rigidity* to the *core* to resist collapse of the *core*, and thereby provide a *freestanding wall* consisting of the *supports* and the *core*: Hatch First Report, paras 73–81; Visser First Report, para 109 (p 42); Transcript, pp 484–485.

[114] Claim 1 does not include the language of "resisting collapse" that is found at paragraph 20 of the disclosure. At the same time, Claim 1 includes the term *freestanding wall*, which is not found in the disclosure. Indeed, the term *freestanding* does not appear anywhere in the patent outside Claim 1, while *wall* is only found in Claim 1 and in the title of the patent. However, I agree with the experts that the idea of a *freestanding wall* imports into it resistance to collapse. A *partition* that collapses will not be *freestanding* and, conversely, one that is *freestanding* has resisted collapse sufficiently to fulfill its function as a *partition*.

[115] The inventors do not discuss the nature of the "collapse" referred to in paragraph 20. However, Mr. Hatch discussed four ways in which the POSITA would understand that an expanded *core* of lattice could collapse: (i) across its width; (ii) vertically; (iii) along its length; or (iv) in a tilting fashion, either inward or outward: Hatch First Report, para 79. He illustrated these types of collapse with the following diagrams, using a block to represent the expanded *core* [my labelling]:



[116] Prof. Visser added to this list the possibility of tilting collapse occurring at the middle portion of the *core* rather than at the base, *e.g.*, the end panel(s) of the *core* flopping in half: Visser Second Report, para 87(iv). This would evidently be a particular concern for taller *partitions*, although it could arise in any *partition* tall enough for a *flaccid* panel to fold over on itself under the force of gravity.

[117] Mr. Hatch and Prof. Visser disagreed somewhat as to the extent to which the *pair of supports* of Claim 1 might resist collapse of the *core* in each of these directions: Hatch First Report, para 79; Visser Second Report, para 87. Before discussing these disagreements, I note that in my view, the POSITA would understand the term *freestanding wall*, which is what brings into Claim 1 the notion of resisting collapse, to refer to a *wall* that stands up under its own weight. There is no requirement in Claim 1 that the partition resist collapse when subjected to external forces like wind or someone pushing against it, either accidentally or deliberately. In other words, in the context of the ’927 Patent, a *partition* does not cease to become a *freestanding wall* simply because someone can knock it over or crush it. There is nothing in the patent that purports to make the *partition* invincible, or even robust. It simply needs to be *freestanding*.

[118] With respect to collapse across the width of the *core* [(i)], Mr. Hatch stated that the panels of the *core* would do little themselves to resist such collapse, but that the *supports* would add *rigidity* to resist this type of collapse. Prof. Visser opined that collapse across the width is typically not a concern, but that the *supports* on the end of the *core* (a) would not provide any *rigidity* to resist collapse across the width resulting from external pressure in the middle of the *core*, and (b) could help resist against the whole partition being collapsed and pushed over from the side. I agree with Prof. Visser that it is difficult to see how a *support* attached to the end of the *core*, which may be many metres away from the centre of the *core*, would resist collapse across the width of the *core*. While resistance to being pushed over may be beneficial, as noted above, I do not consider such resistance to be an aspect of the requirement of Claim 1 that the *supports* provide *rigidity* to the *core* to provide a *freestanding wall*.

[119] I note, too, that the inventors recognize that lateral stability of the *partition* is provided not only by the *supports*, but also by the width of the *partition*. They state that "[w]ith the partition expanded, it has sufficient width to remain stable in a vertical position with the rigidity provided by the end supports": '927 Patent, para 24. The POSITA would know from their CGK that width would impart stability, and that a taller wall may require greater width to be *freestanding*.

[120] With respect to vertical collapse [(ii)], Mr. Hatch and Prof. Visser agreed the expanded *core* would have inherent strength to resist such collapse since the cells of the lattice would run vertically, but the *rigidity* of the *supports* may add to this resistance, particularly at less expanded end portions of the *core*.

[121] The experts also agreed that collapse along the length of the *core* [(iii)] is the desirable collapse of the *core* for storage. Curiously, other than the reference in paragraph 20 to the supports having sufficient rigidity to resist collapse, the only use of the term "collapse" in the '927 Patent refers to this type of collapse. Paragraph 22 refers to the core being "collapsible" and to the partition being stored in a "flat, collapsed position," while paragraph 27 refers to "collapsing" the core to its minimum size: Hatch First Report, para 77. However, this type of collapse is a desirable feature of the *partition*, and has nothing to do with it being a *freestanding wall*. It therefore does not appear to be the type of collapse the *pair of supports* is designed to resist.

[122] With respect to tilting collapse [(iv)], Mr. Hatch considered that the *rigidity* of the *supports* would not resist such collapse. This seems to be true if the *supports* are flat. However, as Prof. Visser observed, the *supports* could assist in resisting tilting collapse if they were, for example, flexed in an arc as seen in Figure 3 of the '927 Patent, reproduced at paragraph [67] above. Prof. Visser also noted that rigid *supports* could assist in resisting tilting collapse in the middle of the *core, i.e.*, prevent the end panels of the *core* from flopping over in half.

[123] In my view, the aspects of collapse that are addressed in Claim 1 are those that relate to the ability of the *partition* to act as a *freestanding wall*. In particular, it would be clear to the POSITA undertaking a purposive construction of the claim that the purpose of the *supports* is to provide an additional *rigidity* to resist the type of collapse that a lattice *core* without such supports would be prone to. I agree with Prof. Visser that this is primarily the "tilting" type of collapse, in which the end panels of the *core* fall outwards, inwards, or bend over.

(ii) how the *supports* provide *rigidity*

[124] Both experts agreed that the *supports* provide *rigidity* to the *core*. However, they disagreed on the POSITA's understanding of how the *supports* would provide that *rigidity*. I note as an initial matter that the POSITA would understand that the *rigidity* is not provided through the folding of the *supports* into a tubular shape, as that is claimed separately in dependent Claims 2 and 3, and addressed separately in the disclosure as providing "enhanced rigidity" above that provided by the *supports* alone: '927 Patent, paras 23, 28.

[125] For Prof. Visser, the POSITA would understand that to add *rigidity* to the *core*, the *supports* must be more rigid than the *flaccid material* of the *core*, as a result of being made of more rigid material (either different material or the same material with increased thickness): Visser First Report, para 109 (p 42); Visser Second Report, para 80; Transcript, pp 774–775, 781. Mr. Hatch disagreed. In his opinion, the POSITA would not understand that the *supports* of Claim 1 had to be more rigid than the *core*, and that they could simply be another layer of the same material as the panels of the *core*: Hatch First Report, para 81; Hatch Second Report, para 54; Transcript, pp 485, 492–493. In his view, the POSITA would simply understand that "when the supports are combined with the core, the partition as a whole is relatively more rigid and less prone to collapse (e.g., is a freestanding wall) as compared to when the supports are absent": Hatch Second Report, para 54.

[126] Having considered the experts' evidence and the language of the Claim 1, I conclude that Prof. Visser's proposed construction is the only one that accords with how a POSITA would understand the claim. To add or provide *rigidity* to the *core*, the *supports* must be more rigid than the *flaccid material* of the *core.*

[127] Mr. Hatch himself recognizes that the *supports* "add rigidity" to the *core* such that the *core* and *supports* together are relatively more rigid than the *core* without the supports: Hatch First Report, paras 73, 80; Hatch Second Report, para 54. However, he presented no cogent explanation as to how a *support* could provide *rigidity* to the *core* without being more rigid than the *core*, how it could provide such *rigidity* without being made of more rigid material, or why a POSITA would consider that a *support* made of *flaccid material* would be described as *self-supporting*: Transcript, pp 610–618. Mr. Hatch also did not explain why or how adding another layer of the same material would result in "the partition as a whole [being] relatively more rigid and less prone to collapse" that when that additional layer is absent, his own description of how the POSITA would understand the term: Hatch Second Report, para 54.

[128] Prof. Visser's construction of the term *self-supporting* is consistent with the disclosure and other claims of the patent. As noted above, paragraph 20 of the disclosure describes the supports as being made from a "self-supporting material, typically a non woven felt material which has a degree of flexibility but also has sufficient rigidity to resist collapse of the core" [emphasis added]. This is the very passage on which Mr. Hatch relies to ground his discussion of "collapse," which he says the POSITA would understand to be inherent in the "*self-supporting* to provide *rigidity* to said *core*" language of Claim 1: Hatch First Report, para 78. Notably, however, the inventors are not referring in this passage simply to the supports having sufficient rigidity to resist collapse of the core, but to the supports being made from a self-supporting material that has a degree of flexibility but sufficient rigidity to resist collapse of the core. Thus while Claim 1 does not refer specifically to the material from which the supports are made, the POSITA would understand from the use of the term "*self-supporting* to provide *rigidity*" that this *rigidity* comes from the *support* and in particular what the *support* is made of.

[129] The POSITA would find this understanding confirmed by the inventors' discussion of materials that may be used for the *core* and the *supports*. As noted above, they teach using paper, Tyvek, or plastic-laminated paper as the *flaccid material* of the *core*, and felt or "material similar to the core material but with increased thickness" for the *supports*: '927 Patent, paras 20, 21, 28. As discussed at paragraph [94] above, these particular materials are claimed in dependent Claims 6 to 11 (for the *laminar panels*) and 12 to 13 (for the *supports*).

[130] I fully agree with Mr. Hatch and Molo that the POSITA would not read the limitations of these dependent claims into Claim 1, and would therefore not consider the *supports* of Claim 1 to be limited to, for example, the felt of Claim 12. Chanel does not argue otherwise. However, the fact that the materials the inventors discuss and claim for use in the *pair of supports* are different from, and more rigid than, the materials they discuss and claim for use in the *laminar panels* would confirm the POSITA's understanding that the *rigidity* that the *supports* impart to the *core* comes from being made of a more rigid material than the *flaccid material* of the *laminar panels*. Indeed, the inventors expressly considered the possibility that the *supports* be made of the same material as the *laminar panels*, and taught that they "may be made from a material similar to the core material but with increased thickness." In any event, and more fundamentally, Mr. Hatch did not explain how the *support* could provide *rigidity* to the *core* without being more rigid than the panels of the *core*, or how it could do so without being made of a more rigid material.

[131] In this regard, the experts both recognized that the properties of a product such as paper could be affected through techniques such as folding: Hatch First Report, para 32; Visser First Report, para 64. The POSITA would thus know that a *flaccid material*, such as paper, could be rendered more rigid by incorporating multiple folds in it or by bonding multiple sheets of it

together to make it thicker and stronger. Thus, the POSITA would recognize, as the patent itself discusses, that a *support* might be made of the same base material as the *core*, provided that it has been turned into a more rigid material, *i.e.*, by effectively giving it increased thickness: ’927 Patent, para 28.

[132] Having concluded that the *supports* must be more rigid than the *core*, a question arises as to whether they can be completely rigid or whether they must have some flexibility. Mr. Hatch suggested the POSITA would understand they need to have some flexibility, because the disclosure describes the *supports* as being flexible and gives felt as an example: Transcript, pp 618–620.

[133] I disagree. As noted above, the inventors state in paragraph 20 of the disclosure that the supports are “made from a self-supporting material, typically a non woven felt material which has a degree of flexibility but also has sufficient rigidity to resist collapse of the core.” The language of Claim 1 imports the notion of “self-supporting material” through the reference to the *supports* being *self-supporting*. It also imports the notion of having “sufficient rigidity to resist collapse of the core” through the reference to the *supports* providing *rigidity* to provide a *freestanding wall*. However, it does not include language that imports the notion of having a degree of flexibility. To the contrary, dependent Claim 2, discussed further below, adds a limitation that the *supports* be *flexible*. Applying the presumption of claim differentiation, the POSITA would understand that the additional limitation of flexibility in Claim 2 suggests that the *supports* of Claim 1 need not be flexible.

[134] I note that I found Mr. Hatch’s evidence and approach on this issue to be inconsistent. Mr. Hatch considered that the *supports* of Claim 1 must be flexible, even though the claim does

not refer to it, because the disclosure refers to flexibility and to felt as an example material: Transcript, pp 618–620. Yet he also insisted that the *supports* need not be more rigid than the *core*—even though the very same sentence that refers to felt and to flexibility also refers to rigidity—since Claim 1 did not refer to this rigidity: Transcript, pp 610–617. This inconsistent incorporation of teachings from the disclosure, which in my view runs contrary to the claim language, appeared designed to thread a fine line between infringement issues raised below by the honeycomb paper used by Chanel and invalidity issues raised by some of the prior art. It is unpersuasive in light of the language of the claims.

(e) Conclusion

[135] For the foregoing reasons, I conclude the POSITA reading Claim 1 purposively and in the context of the ’927 Patent as a whole would understand it to claim the following, with each element being essential to the claim:

(a) An article (a physical object rather than a particular use of an article) of *flexible furniture* (a moveable and bendable object) that is or includes a *partition* (that can form a wall capable of subdividing spaces, but not necessarily taller than it is wide);

(b) the *partition* having a *core* made up of multiple *laminar panels* (sheet-like layers) made of *flaccid material* (softer and more pliant than merely *flexible*, and sufficiently soft and flexible to be suitable for use, but without imposing a requirement to bend sharply over short distances), whose *adjacent faces* are *inter-connected* so they form a *lattice structure* when pulled apart, such as through the

use of offset vertical adhesive stripes (without excluding a lattice in which the width of inter-connection is wide enough that the resulting lattice cell or void can be described as hexagonal);

(c) two *supports*, one at each end of the *core* and connected to the outer face of the outermost panel of the *core*;

(d) the *supports* being *self-supporting* (but not in the sense of being able to stand on their own) to provide *rigidity* to the *core* (and thus being more rigid than the *core* and potentially fully rigid, being made of more rigid material than the *flaccid material* of the panels), such *rigidity* resulting in the *supports* and *core* resisting collapse of the *core* so as to be a *freestanding wall* (able to stand on its own under its own weight) when the *supports* are pulled in opposite directions to expand the *lattice*.

(6) Asserted dependent claims

[136] Each of the remaining Asserted Claims, namely Claims 2, 3, 5–7, and 13–17, depends from Claim 1 and thus claims an article of *flexible furniture* with all of the essential elements of Claim 1, plus additional essential elements set out in the claims.

(a) Claim 2

[137] Claim 2 places additional limitations on the *pair of supports*:

> 2. An article of flexible furniture according to claim 1 wherein said supports are flexible and may be folded into a tubular configuration.

[138] As discussed above, the requirement that the *supports* of Claim 2 be *flexible* underscores that such flexibility is not a requirement of the *supports* of Claim 1, which may be fully rigid. At the same time, the *supports* of Claim 2 must still be *supports* as claimed in Claim 1, and must therefore still provide *rigidity* to the *core*.

[139] The parties agree that the requirement that the *supports* "may be folded" into a *tubular configuration* means that they are capable of being folded into such a configuration, rather than necessarily having to be folded into that configuration: Hatch First Report, para 86; Visser First Report, para 110 (p 44). This is consistent with the claim being to an article, rather than to a particular use of an article. The result is that the expression "may be folded into a *tubular configuration*" simply acts as a qualifier to the degree of flexibility of the *supports*, effectively meaning that the *supports* are *flexible* such that they may be folded into a *tubular configuration*.

[140] In Prof. Visser's view, the POSITA would understand that it would be possible to fold the *supports* into such a configuration "by hand." Mr. Hatch disagreed, considering that the ability to fold the *supports* by hand was an extraneous and additional requirement not reflected in the claim: Hatch Second Report, para 57. While little turns on this disagreement, in my view, Prof. Visser's construction seems consistent with the context of the '927 Patent as a whole. The patent speaks to, among other things, problems with prior art partitions that are cumbersome or difficult to set up or take down, and says that it presents a partition that mitigates these disadvantages. In such a context, it seems incongruous that the POSITA would understand Claim 2 to encompass *supports* so rigid that they can only be folded into a *tubular configuration* with the assistance of special equipment or a machine.

[141] The experts agreed that the term *tubular configuration* invoked the folding illustrated in Figure 5 of the patent, reproduced at paragraph [70] above: Hatch First Report, paras 87–88; Visser First Report, para 110 (p 44). As can be seen in that figure, and as described in the disclosure, the *support* is folded along a vertical axis, with the opposite edges of the *support* being brought together. The result is that the folded support defines a form of tube with a teardrop shaped void or hollow space in the middle, while the end panels of the *core* are drawn around to form a semicircular shape at the end of the *partition*.

[142] Mr. Hatch initially appeared to indicate that the *tubular configuration* of Claim 2 referred to the "generally rounded outer shape" formed by the end panels of the *core*: Hatch First Report, paras 86, 88; Transcript, p 621. However, he confirmed on cross-examination that his understanding was consistent with that of Prof. Visser, namely that the *tubular configuration* referred to the configuration of the *support*, defining a void or hollow in the middle of the folded *support*: Transcript, pp 621–622; Visser First Report, para 110 (p 44). I agree with this construction. Claim 2 is clear that the *support* may be folded into a *tubular configuration*, rather than the *core* or the *partition* as a whole. While the result may be that the *core* defines a rounded or semi-circular shape, the language of the claim refers to the configuration of the *support* alone.

[143] Molo argued in closing submissions that the *tubular configuration* did not require a void or hollow, and could thus entail the support being folded flat. I disagree. The essence of a tube, and thus of a *tubular configuration*, is the presence of a hollow. The inventors expressly used language referring to a tube, and illustrated their invention showing such a tube. There is no evidence that the POSITA would have any different or unusual understanding of the concept of a tube or the adjective *tubular*. In the context of the patent, the POSITA would understand the

tubular configuration to entail a configuration of the *supports* that defines a hollow space, such as the teardrop shaped void shown in Figure 5.

[144] That said, it is worth repeating that Claim 2 only requires that the *supports* be *flexible* such that they may be folded into a *tubular configuration*, rather than that they be folded into such a configuration or that they be used in such a fashion.

(b) Remaining Asserted Claims

[145] The remaining Asserted Claims depend, directly or indirectly, from Claim 1. Some depend solely from a single prior claim, while others depend from any one of the previous claims.

[146] Claim 3 depends from Claim 2. It adds the requirement that the article of *flexible furniture* include *fasteners* on the *supports* to maintain the *tubular configuration* referred to in Claim 2. There was no dispute that the POSITA would understand that such *fasteners* could include the hook and loop strips referred to in the disclosure, but could also include other types of fastener, such as adhesives, clips, or screws: Hatch First Report, para 91; Visser First Report, paras 77–78, 110 (p 45). That the term *fasteners* is not limited to hook and loop strips is reinforced by the fact that Claim 4 separately adds the limitation that the *fasteners* are hook and loop fasteners. The *fasteners* must be "on" the *supports*, indicating they are attached to or part of the *supports*: Visser First Report, para 110 (p 45). The phrase "to maintain" would be understood to mean that the *fasteners* are configured or attached in such a fashion that they keep the folded *supports* in the *tubular configuration*: Hatch First Report, para 91.

[147] Claim 5 depends from any one of Claims 1 to 4, and adds the limitation that the *lattice structure* defines a "plurality of parallel voids oriented on the *longitudinal axis*" of the *laminar panels*. The experts had somewhat differing interpretations of the term *longitudinal axis*. Prof. Visser considered the POSITA would understand it to mean that the voids of the *lattice structure* ran parallel to the longest axis of the *laminar panel*: Visser First Report, para 110 (p 46). Mr. Hatch did not address this issue in his First Report, but disagreed with Prof. Visser's opinion in his Second Report, stating that the POSITA would understand the *longitudinal axis* to mean a direction that is at right angles to the "lateral" direction across which the adhesive stripes are placed, and to be generally the upright (vertical) direction when the *partition* is in use: Hatch First Report, para 92; Hatch Second Report, para 59. However, in his testimony at trial, Mr. Hatch appeared to concede that the POSITA would understand, or at least may understand, the *longitudinal axis* to mean the direction of the longest side of the paper: Transcript, pp 502–503.

[148] I prefer Prof. Visser's construction as more consistent with how a POSITA would understand the language of Claim 5. Indeed, Mr. Hatch's construction appears at odds with his own earlier opinions. In discussing Claim 1, Mr. Hatch stated that the POSITA would understand the "lateral" direction of the panel to be the direction of its width, and that the "length, the longer or 'major' dimension [of the panel] would be considered a longitudinal direction" [emphasis added]: Hatch First Report, paras 65–67, 96(a)–(b). This statement directly accords with Prof. Visser's construction. Mr. Hatch's construction also appears to be redundant since, by definition, the voids of the lattice will run parallel to the adhesive stripes and thus perpendicular to the lateral direction across which they are placed.

[149] Prof. Visser's construction is not redundant, as it requires the voids of the lattice to run parallel to the longest side of the *laminar panel*. I note in this regard that the experts each agreed that the POSITA would understand that the voids in the *lattice structure* of Claim 1 would be oriented vertically: Hatch First Report, paras 61, 66–70; Visser Second Report, para 73. This understanding underlay their discussion of the potential directions of collapse and the resistance of the *core* to such collapse. Neither expert indicated that a *partition* with a *lattice structure* with, for example, horizontal cells would be able to act as a *freestanding wall*. The result is that Claim 5, requires that the vertical cells be parallel with the longest direction of the panel, *i.e.*, that the *partition* is taller than it is wide.

[150] Claims 6 and 7 add limitations on the material of the *laminar panels*. Claim 6 requires them to be formed from paper; Claim 7 requires them to be formed from a *non-woven material*. The experts agree that the POSITA would understand that the *non-woven material* of Claim 7 would include felt or Tyvek, and would not include paper: Hatch First Report, paras 94, 123 (p 62); Visser First Report, para 110 (p 47).

[151] Claim 13 adds a limitation on the material of the *supports*, namely that they be formed from a *non-woven material*. Again, the experts agree that the POSITA would understand the *non-woven material* of Claim 13 to include felt or Tyvek, and not to include paper, which accords with the presumption of claim consistency: Hatch First Report, paras 95, 123 (p 63); Visser First Report, para 110 (p 47). Mr. Hatch added that the POSITA would understand the *non-woven material* to be "of the material type and/or thickness to provide the necessary rigidity the supports are described by the 927 Patent to give": Hatch First Report, para 95. While I agree with this statement, I find it conflicts with Mr. Hatch's assertions that the POSITA would

understand the *supports* need not be more rigid than the *laminar panels* of the *core*: see paras [125]–[130] above.

[152] Claims 14 and 15 add limitations to the *major dimension* of the *laminar panels*. The experts agree that the POSITA would understand the term *major dimension* in accordance with the inventors' statement in the disclosure that "[e]ach panel has a major dimension or height h": '927 Patent, para 18; Hatch First Report, para 96(a); Visser First Report, para 110 (p 48). As noted above, Mr. Hatch equated this with the *longitudinal* direction of the panel: Hatch First Report, paras 65, 96(a). Claim 14, which depends from any one of Claims 1 to 13, limits the *major dimension* or height of the panels to between 0.5 and 3 metres. Claim 15 depends from Claim 14 and limits the *major dimension* to between 1 and 2 metres.

[153] Claims 16 and 17 add limitations to the width of the *laminar panels*. Claim 16, which depends from any one of Claims 1 to 15, limits the width of the panels to between 10 and 100 centimetres. Claim 17 depends from Claim 16 and states that the "width is 30 and 45 centimetres." While Claim 17 appears to be missing the word "between," I agree with the experts that the POSITA with a mind willing to understand would read Claim 17 as limiting the width to between 30 and 45 centimetres: Hatch First Report, para 96(d); Visser First Report, para 110 (p 49).

C. *Infringement*

(1) Principles

[154] A patent will be infringed if any valid claim of it is infringed. A claim is infringed if the accused product, system, use, or method comprises all of the essential elements of the claim as they have been construed: *Free World Trust* at paras 68(4), 75; *Western Oilfield* at paras 48–49. Conversely, the claim is not infringed if any essential element is different or omitted in the accused product, system, use, or method: *Free World Trust* at para 31(f). In each case, the infringer's intention or knowledge is irrelevant: *Monsanto Canada Inc v Schmeiser*, 2004 SCC 34 at paras 49, 86; *Nova Chemicals Corp v Dow Chemical Co*, 2022 SCC 43 at para 98 (*per* Côté J., dissenting, but not on this point). The onus lies on the party asserting infringement, here Molo, to prove that the impugned product used by Chanel contains each essential element in one or more claims of the '927 Patent: *Monsanto* at para 29.

[155] Molo's allegations in respect of Chanel SAS and Procédés Chénel raise two additional concepts related to infringement, namely inducing infringement and infringement by "common design."

[156] Inducing infringement is a form of patent infringement, rather than distinct tort: *Western Oilfield* at para 60, citing *Hospira* at para 45. To establish liability for inducing infringement, a plaintiff must prove each part of a three-part test: (1) there has been infringement by a direct infringer; (2) the alleged inducer must have influenced the acts of infringement to the point that, without the influence, the direct infringement would not have taken place; and (3) the inducer

must have known that the influence would result in the completion of the acts of infringement: *Corlac Inc v Weatherford Canada Inc*, 2011 FCA 228 at para 162, leave to appeal ref'd 2012 CanLII 16427 (SCC); *Apotex Inc v Janssen Inc*, 2023 FCA 220 at paras 4–5, leave to appeal ref'd 2024 CanLII 50580. The test is a "difficult one to meet": *Corlac* at para 162.

[157] An allegation of infringement by "common design" is an allegation that invokes a general principle of tort law, namely that defendants may engage "concerted action liability" as joint tortfeasors where they "acted in furtherance of a common design": *Botiuk v Toronto Free Press Publications Ltd*, 1995 CanLII 60 (SCC) at para 74, citing Fleming, John G, *The Law of Torts*, 8th ed (Sydney: Law Book Co, 1992) at p 255; *Fullowka v Pinkerton's of Canada Ltd*, 2010 SCC 5 at para 154; *Sea Shepherd UK v Fish & Fish Limited*, [2015] UKSC 10 at paras 12, 19–25, 37–44, 55–61, 90–91. Liability will attach where there is a "design or agreement of persons to participate in acts which are tortious, even though they did not realize they were committing a tort": *Botiuk* at para 75. The UK Supreme Court has held that establishing such accessory liability requires proof that the defendants have acted to further the commission of the tort by another, and have done so in pursuance of a common design to do the acts which constituted the tort: *Sea Shepherd* at paras 21, 55.

[158] Courts in the UK have accepted that there may be liability for patent infringement based on common design: *Molnlycke AB et al v Proctor & Gamble Limited et al*, [1992] 4 All ER 47 (CA) at pp 52–53, 57–58; *Unilever v Gillette*, [1989] RPC 583 (CA) at pp 603, 607–609; *Bauer Hockey Corp v Easton Sports Canada Inc*, 2010 FC 361 at para 206; see Simpson, John H, *Liability of Foreign Manufacturers for Inducing Patent Infringement in Canada* (2009), 25:1

CIPR 153 at pp 163–164. To date, no Canadian case has found a defendant liable for patent infringement by common design, although the plea has survived motions to strike: *Packers Plus Energy Services Inc v Essential Energy Services Ltd*, 2017 FC 1111 at paras 48–49; *Rovi Guides, Inc v Videotron Ltd*, 2022 FC 981 at paras 14–15, 45–47; *Genentech, Inc v Celltrion Healthcare Co, Ltd*, 2019 FC 293 at paras 40–41.

[159] Procédés Chénel underscores the observation of Justice O'Reilly in *Packers Plus* that "there is no authority in Canadian law for the proposition that a person can be found liable for infringement on the theory of common design": *Packers Plus* at para 48. It also notes that the Federal Court of Appeal has confirmed that in Canada, there is no cause of action for "contributory infringement": *Nycomed Canada Inc v Teva Canada Limited*, 2012 FCA 195, aff'g 2011 FC 1441 [*Nycomed (FC)*] at paras 18–28. However, *Nycomed (FC)* did not involve an allegation of common design, but simply that the defendants knew or ought to have known a product would be used in an infringing manner, and that they contributed to the infringing activities: *Nycomed (FC)* at paras 1–2.

[160] Given my conclusions below on the existence of direct infringement, I need not decide whether the common law concept of liability based on "common design" or "concerted action liability" is applicable to the statutory tort of patent infringement, or the relationship between the concept of infringement by common design and that of inducing infringement.

(2) Chanel's SS21 Act 1 window décor

[161] In the fall of 2020, Chanel began work on the window décor that would be installed in store windows in connection with the Spring/Summer 2021 Act 1 collection. After reviewing the collection to see its fashion themes and inspirations, Mr. Rigo and his window design team at Chanel SAS started its own creative research for the displays that would highlight the collection in Chanel storefronts.

[162] As part of the design process for creating the SS21 Act 1 window décor, the window design team prepared "mood boards," which are a collection of images and/or sketches intended to communicate the ideas and moods that underlie and inspire the design, including matters such as colours, materials, and the general feeling or mood the designers want to convey. These mood boards were changed and refined over time as the design thinking developed.

[163] A number of mood boards created for the SS21 Act 1 window décor project were filed in evidence: Exhibits 84, 85, 101, 142, 143; Hatch Second Report, Exhibits J, K, L. The timeline of some of the mood boards is uncertain, but it is clear that pictures of Molo softwall and softblock products appear in the mood boards beginning very early in Chanel's creative process and remain in them throughout the process, in addition to other pictures from other sources. Chanel SAS apparently obtained the Molo photographs, which include a number showing Ms. Forsythe, from Molo's website.

[164] These mood boards led to initial concept drawings; more specific drawings of the planned window décor; preparation of a physical prototype; and ultimately to guideline documents with instructions on how the windows were to be decorated. Pictures of Molo's products remained part of the mood board elements of guideline documents that were sent to Chanel subsidiaries worldwide: Exhibits 84, 85.

[165] The final design for the SS21 Act 1 window décor involved black and illuminated white honeycomb tissue paper elements of various sizes and shapes, with mannequins wearing pieces of the SS21 Act 1 collection, as seen in the following photograph of a Canadian window display (Exhibit 89) [the Chanel Products]:

[166] The Chanel Products appearing in the window décor were made of blocks of honeycomb tissue paper, varying in height between about 30 centimetres to about 2.4 metres: Exhibits 59,

78, 88, 131–136. The width of each block was between about 28 and 33 centimetres when flat, and they had different numbers of sheets, permitting them to be extended to different lengths. As set out in the instructions and guidelines sent by Chanel SAS, the ends of the paper blocks had hook and loop fasteners attached to them. The ends were folded in on themselves to create a rounded end, and fastened with the hook and loop fasteners. Holes in the white paper blocks accommodated lighting strips running the length of the block.

[167] For its windows in France, Chanel SAS made inquiries of Molo through a third party, but ultimately ordered the paper block elements from Procédés Chénel. Procédés Chénel purchased the honeycomb tissue paper blocks from Fest-Dekor. It then transformed them by cutting them to size, cutting the wave shapes visible in the tallest of the finished products, cutting the holes for the lighting, and adding the hook and loop fasteners, before delivering them to Chanel SAS for installation.

[168] Mr. Rigo sent the SS21 Act 1 window décor guidelines to the global Chanel window décor team, including Ms. Diaconescu and her team at Chanel Canada. Mr. Rigo proposed Procédés Chénel and Molo as potential suppliers, but asked that if any member of the window décor team wanted to use Molo, that they first contact Mr. Rigo. Ms. Diaconescu did so, and discussed Molo with Mr. Rigo by telephone. It is clear that during this call, Mr. Rigo conveyed some concerns about using Molo as a supplier and the potential for a dispute with Molo in the event that Molo was not used: Exhibit 83; Confidential Transcript, pp 193–194, 249–260.

[169] Ultimately, Chanel Canada decided not to contact Molo for supply of the requisite honeycomb paper elements for the SS21 Act 1 window décor in Canada. It obtained its supply of the paper elements from Procédés Chénel. This was done through the company that builds and installs Chanel Canada's window displays, a Montreal-based numbered company known as "Étalage B Display." Procédés Chénel again ordered the raw honeycomb paper material from Fest-Dekor and performed the transformation, in France.

[170] It is clear from the record that Chanel was aware of Molo and its products; that Chanel SAS drew inspiration from the softwall and softblock in designing the window décor for the SS21 Act 1 collection; and that in implementing that décor, Chanel SAS and Chanel Canada each chose to purchase honeycomb paper elements supplied by Procédés Chénel rather than Molo. The witnesses' testimony and the parties' arguments raised some disagreement about the reasons for the choice not to purchase Molo products. In my view, this disagreement is immaterial to the fundamental issue in dispute: whether the Chanel Products supplied by Procédés Chénel via Étalage B and used in the SS21 Act 1 window décor for Chanel windows in Canada, infringed any valid claim of the '927 Patent. This issue is unaffected by either Chanel's knowledge of Molo, its use of softwall and softblock as a source of inspiration, or the reasons Chanel Canada chose not to purchase Molo products for its window décor.

(3) Molo has not established infringement

[171] To demonstrate that the Chanel Products are infringing, Molo must show that they contain each of the essential elements in one or more claims of the '927 Patent. The fact that the claims of the '927 Patent claim an article rather than a particular use means it is immaterial

whether the Chanel Products were actually used to subdivide space (*e.g.*, whether there was space behind them in the windows); or whether they were used as *freestanding walls* (*e.g.*, whether they were attached to walls for stability or whether the support poles of the mannequins provided additional stability). The issue is whether the properties of the Chanel Products satisfy the essential elements of Claim 1 as construed above.

[172] The central issue between the parties on the issue of infringement is whether the Chanel Products in the SS21 Act 1 window décor had a *pair of supports* that are *self-supporting* to provide *rigidity* to the *core*. Chanel argues that the Chanel Products had no such *supports* and that they consisted simply of honeycomb paper, which the ’927 Patent describes and claims as the *core*. Molo argues that the Chanel Products had *supports*, in the form of the outer sheets of paper of the blocks, which it argues added *rigidity* to the *core*, which consisted of the interior sheets.

[173] For the reasons that follow, I agree with Chanel and reject Molo’s contention that the outer sheets of the honeycomb tissue paper of the Chanel Products constituted a *pair of supports* within the meaning of Claim 1 of the ’927 Patent. Since the Chanel Products supplied by Procédés Chénel and used by Chanel Canada did not comprise all of the essential elements of Claim 1, neither Claim 1 nor any of the Asserted Claims that depend from Claim 1 are infringed.

(a) The outermost sheet of paper is not precluded from being a *laminar panel*

[174] Relying on Mr. Hatch’s evidence, Molo argues that the two outermost sheets of the Chanel Products are not part of the *core*, but are *supports* that are *connected to* the outer face of

the outermost *laminar panel* of the *core*. It argues first that the two outermost sheets of tissue paper do not meet the description in Claim 1 of a *laminar panel* of the *core*. It notes that the claim requires the *adjacent faces* of the *laminar panels* to be *inter-connected*, and argues that only one face of the outermost sheet of the blocks is connected to an adjacent panel, such that it cannot be a *laminar panel*: Hatch Third Report, paras 31–37; Transcript, pp 527–530.

[175] I am wholly unpersuaded. I note as an initial matter that Mr. Hatch's opinions on this issue were set out for the first time in his Third Report, rather than in his First Report addressing infringement. In his First Report, he used considerably different language in discussing the *supports* and presented no explanation regarding the asserted difference between the *laminar panels* and the *supports* based on the question of *adjacent faces* and *inter-connection*: Hatch First Report, paras 107, 123 (pp 56–57).

[176] In any event, the opinion Mr. Hatch gives in his Third Report does not conform with the language of the '927 Patent. He asserts the following:

> To be a "core panel" as that term is used in claim 1 of the 927 Patent, the POSITA would understand that the panel must be inter-connected on both major faces to adjacent panels. This understanding is consistent with both claim 1 of the 927 Patent itself and the description of the 927 Patent. The outermost layers (or "ends") of the accused products are not inter-connected with panels on both sides, so the POSITA would not understand them to be "core panels".
>
> [Emphasis added; Hatch Third Report, para 31.]

[177] By "core panel," which is not a term used in Claim 1 or elsewhere in the '927 Patent, I understand Mr. Hatch to be referring to a *panel* or *laminar panel* that is part of the *core*. Contrary

to Mr. Hatch's assertion, Claim 1 does not require the *laminar panels* of the *core* to be "inter-connected on both major faces to adjacent panels." Rather, as Chanel notes, it requires the *adjacent faces* of the *laminar panels* (*i.e.*, those faces that are adjacent to the face of another *laminar panel*) to be *inter-connected* so as to provide a *lattice structure*.

[178] Notably, in order for Mr. Hatch to argue that the *panels* of the *core* must be *inter-connected* "on both major faces to adjacent panels," he has to refer to the *support* itself as a *panel* or as a "support panel": Hatch Third Report, paras 33–35. However, neither the claims nor the disclosure of the '927 Patent refers to the *supports* as *panels*. To the contrary, they are referred to simply as *supports*, while the term *panel* is reserved to the *laminar panels* that make up the *core* (and, as noted above, occasionally to the *partition* as a whole). Even in Claim 12, where the *supports* are referred to as being formed from a "felt panel," the patent does not refer to the *support* as a *panel* or to a "support panel." Mr. Hatch redefines the *supports* as *panels* in order to then argue that the *panels* of the *core* are necessarily connected to *panels* (either a "core panel" or a "support panel") on both sides: Hatch Third Report, para 33. This is not a viable approach to the construction of Claim 1 or the issue of infringement.

[179] Further, Claim 1 uses the word *inter-connected* to refer to the connections between *laminar panels*. The claim then refers to the *support* as being *connected* (not *inter-connected*) to the face of a *laminar panel*. Thus, contrary to Mr. Hatch's assertion, the claim does not require the *laminar panels* to be *inter-connected* with either a *laminar panel* or a *support*; to the contrary, the use of the term *inter-connected* refers only to connections between *laminar panels*. This is confirmed when reading the phrase as a whole, which refers to the "*adjacent faces* of said

panels being *inter-connected* to provide a *lattice structure*." It is the alternating adhesive stripes between the *inter-connected panels* of the *core* that provide the *lattice structure,* and not the connection between the outermost *panel* and the *support*. There is no indication that the inventors are referring to the connection between the outermost *laminar panel* and the *support* as part of the *inter-connection* of *laminar panels* that provides a *lattice structure*, and no indication that each *laminar panel,* including the outermost *laminar panel,* must be "inter-connected on both major faces to adjacent panels," as Mr. Hatch contends.

[180] In essence, Molo and Mr. Hatch's argument is a circular one, as it effectively asserts that any block of honeycomb paper must necessarily have a *support*, since its outer sheet can never be a *laminar panel* of the *core*. This is directly at odds with the language of Claim 1, which describes and claims a *support* as something that is different from, and connected to, the *laminar panels* of the *core*.

[181] I conclude that, contrary to Mr. Hatch's assertion, the POSITA would not understand that to be a *laminar panel* of the *core*, the *panel* "must be inter-connected on both major faces to adjacent panels." In construing the claims of the patent, Mr. Hatch did not assert that a POSITA would understand this. Rather, this appears to be a new and strained construction arrived at in order to capture the paper elements used by Chanel that consisted only of honeycomb paper. This is not the proper approach to the exercises of claims construction and assessing infringement: *Whirlpool* at paras 43, 49(a)–(b).

(b) The outermost sheet does not provide *rigidity* to the *core*

[182] In any event, even if the foregoing arguments were accepted, I am not satisfied that the outer sheet of tissue paper in the honeycomb paper blocks used by Chanel is "*self-supporting* to provide *rigidity*" to the *core*. Neither Molo nor Mr. Hatch provided any coherent or satisfactory explanation as to how the final sheet of paper adds any *rigidity* whatsoever to the *core*.

[183] In this regard, I note that Mr. Hatch's initial infringement opinion simply asserted that the *supports* on the Chanel Products provided *rigidity*, without discussion or explanation. He addressed the issue of *rigidity* in two statements. First, he stated that the *supports* on the Chanel Products "appear to be made of the same laminar material as the core, but are layered, affixed permanently to the outer core panel, and serve to offer rigidity to […] resist collapse of the core" [emphasis added]: Hatch First Report, para 107. Second, in a claim chart, he presented a picture of an expanded honeycomb block with the label "Support" on one end and a caption reading in part as follows:

> On the Accused Products, the self-supporting supports provide rigidity to the core to provide a freestanding wall. It is evident the supports at the ends which are bonded to the core add support to the partition.
>
> [Emphasis added; Hatch First Report, para 123 (p 57).]

[184] In each case, Mr. Hatch simply presents a bald assertion that the outermost sheet provides *rigidity*, without any explanation why he reached this conclusion or how the final piece of tissue paper in a block of honeycomb paper provides *rigidity* to the remainder. Nor did he explain why he considered it "evident" that these two outer sheets "add support to the partition." In his

Third Report, Mr. Hatch focused on the *panel* vs *support* issue discussed above and on his opinion that the *support* may be made of the same material as the *laminar panels*, but again provided no explanation for his opinion that the final sheet of tissue paper provided *rigidity* to the *core*. I note that Mr. Hatch confirmed that despite having referred to the *supports* as "layered" and "affixed permanently to the outer core panel," he was simply referring to the outermost sheet adding an additional layer to the *core*: Transcript, pp 628–629.

[185] In his testimony at trial, Mr. Hatch asserted that the *supports* in the Chanel Products provide *rigidity* in a sideways or lateral direction (*i.e.*, across the width of the block). His explanation was that in a picture of the product that was expanded, the block narrowed in the middle where it did not have the support to keep the "sideways collapse" from happening: Transcript, p 524; Hatch First Report, para 123 (p 58).

[186] I do not accept this explanation. As Mr. Hatch himself confirmed, the "narrowing" that occurs in a block of expanded honeycomb paper is simply a function of its expansion, since the more the sheets are pulled apart lengthwise, the narrower the block's width necessarily becomes: Transcript, pp 180, 655–656; Hatch First Report, para 123 (pp 57–58); Exhibits 11–14, 58–59, 62, 64, 78, 131–136. This does not constitute or cause the wall to "collapse," and there is no indication that the natural narrowing of the *lattice structure* of the *core* as a result of it being stretched is the type of "collapse" the '927 Patent is referring to. Nor is there any indication that the outermost sheet of tissue paper in the Chanel paper elements resists such collapse at the end of the block. The fact that the ends of the block are visibly wider in the photograph Mr. Hatch was referring to is simply because they are less stretched at that place.

[187] Further, and bringing the issue back to the specific language of Claim 1, there is no indication that any such resistance to collapse is the result of the outermost sheet of tissue paper providing *rigidity* to the *core*. Other than pointing to the narrowing in the centre of the block, Mr. Hatch provided no evidence or opinion as to how the last sheet of tissue paper in a honeycomb paper block provides any *rigidity* to the remaining sheets of exactly the same paper. As Mr. Hatch recognized, the *supports* of Claim 1 must "add rigidity" to the core and make the end "more rigid": Hatch First Report, paras 73, 75, 80; Transcript, pp 484–485.

[188] Mr. Hatch asserted that the mere addition of a further sheet of tissue paper to a block of honeycomb tissue paper would add such *rigidity* to the *core*: Transcript, pp 500–501, 611. He asserted that the POSITA would understand "based on their knowledge that a simple additional layer can -- outside of the core can itself can increase, albeit in small exact ways, increase the rigidity in potentially two different ways": Transcript, p 501. To the Court's understanding, the "two different ways" Mr. Hatch is referring to is first, simply by being added to the *core*, and second, when the final sheet is folded in on itself, it can provide the "enhanced rigidity" described in the patent; '927 Patent, para 23, Claims 2, 3. Again, however, beyond pointing to the narrowing of the width of the block, addressed above, Mr. Hatch gave no information or basis for his conclusion that simply adding a further sheet of the same paper can add any *rigidity* to the other pieces of paper at all, even in "small exact ways."

[189] Mr. Hatch's assertion is counterintuitive and is not borne out by the physical exhibits. The Chanel Products have well over 100 sheets of tissue paper. Mr. Hatch's assertion is effectively that in a block of honeycomb tissue paper of, say, 100 sheets, the 1st and 100th sheet

adds *rigidity* to the block that is not provided by the other 98 sheets, such that it is more rigid than a block of 98 sheets. Neither Mr. Hatch nor Molo has satisfied me that this is the case. To use Mr. Hatch's own language, there is no indication or explanation that when the 1st and 100th sheet are "combined with the core, the partition as a whole is relatively more rigid and less prone to collapse (e.g., is a freestanding wall) as compared to when" those sheets are absent: Hatch Second Report, para 54.

[190] Nor did Mr. Hatch explain what part of the CGK of the POSITA—an industrial designer with knowledge of, among other things, the properties of materials such as papers—would lead them to understand that the last sheet adds *rigidity* to the remainder. I prefer Prof. Visser's opinion, which accords with the Court's assessment of the evidence, that the "end panel, which is the same material and thickness as the other panels of the core, does not add any rigidity to resist collapse of the core because it has the same rigidity as the core panels": Visser Second Report, para 110. This, in my view, would accord entirely with a POSITA's assessment.

[191] In this regard while Claim 1 provides that the *supports* provide *rigidity* to the *core* to provide a *freestanding wall*, this does not mean that every *freestanding wall* must have, by definition, a *support* that provides sufficient *rigidity* to the *core* to resist collapse. Such an approach would again be circular, and would render redundant the essential language of Claim 1 requiring that the *support* provide *rigidity* to the *core*.

(c) The outermost sheet is not *self-supporting*

[192] As set out above at paragraphs [124] to [131], the POSITA would understand that the requirement of Claim 1 that the *supports* be *self-supporting* to provide *rigidity* to the *core* means that the *supports* are made of more rigid material than the *core*. Molo does not contend that the outermost sheet of tissue paper in the Chanel Products is more rigid than the remainder of the tissue paper making up the *core*. The Chanel Products therefore do not have *supports* of Claim 1 for this reason as well.

[193] For clarity, even if it were not a requirement of Claim 1 that the *self-supporting supports* be made of a more rigid material than the *core*, the experts agree that the *supports* must still provide *rigidity* to the *core*. For the reasons above, Molo has not satisfied me that the Chanel Products have *supports* that provide *rigidity* to the core in any way, whether due to their material or otherwise.

(d) The Chanel Products do not have a *core* and *supports*

[194] While the foregoing is sufficient to dispose of Molo's claim that Chanel infringed Claim 1 of the '927 Patent, it is worthwhile in my view to also take a step back to consider Claim 1 as a whole. From its very structure, the POSITA would understand Claim 1 to claim an article of *flexible furniture* that is or contains a *partition* with two main elements: a *core* made of *inter-connected laminar panels* that expand to form a *lattice structure*; and a *pair of supports* that are *self-supporting* to provide *rigidity* to the *core* to provide a *freestanding wall* when the *supports* are moved apart to expand the *lattice*.

[195] The POSITA would understand the *core* and the *supports* to be distinct elements of the claimed *partition*. The POSITA would recognize from the language of Claim 1, read in the context of the ’927 Patent, that the *core* might be, for example, a block of standard white tissue paper with offset stripes of adhesive such that it opens up to provide a *lattice structure*. That is to say, the POSITA would understand that the *core* could be a block of honeycomb tissue paper. They would further understand that the *partition* of Claim 1 could be this *core* of honeycomb tissue paper with a *support* added to either end to provide *rigidity* to the honeycomb tissue paper. The POSITA would not understand, on any reasonable reading of the ’927 Patent or Claim 1, that a block of honeycomb tissue paper without anything added to the ends to provide *rigidity* would nonetheless be a *partition* of Claim 1 because the outermost sheet of tissue paper in the *core* becomes the *support* by definition, as long as the block can be made to stand up by itself. Nor would the POSITA understand that the outermost sheet of tissue paper provides any *rigidity* at all, or that it could be considered a *support* because the tissue paper block narrows in the middle when it is pulled apart.

[196] Yet this is the essence of Molo’s arguments and Mr. Hatch’s opinions. Their efforts to redefine the outermost *laminar panel* of a *core* of honeycomb tissue paper as a *support*, in order to capture the Chanel Products, impose constructions that are inconsistent with both the specific language of Claim 1 and with the very nature of the *partition* of Claim 1 as including a *core* and a *support* as different and distinct elements. This leads them to espouse theories regarding *rigidity* and the function and nature of the *supports* that are simply untenable on the language of the claim and are in a number of aspects circular.

(e) Conclusion

[197] As the Chanel Products do not have a *pair of supports* that are *self-supporting* to provide *rigidity* to the *core* to provide a *freestanding wall*, as the POSITA would understand those terms within the meaning of Claim 1, they do not fall within the scope of that claim. Chanel Canada has not infringed that claim, and Chanel SAS and Procédés Chénel cannot have induced or participated in the infringement of that claim.

[198] All of the other Asserted Claims depend, directly or indirectly, from Claim 1. They each therefore include as an essential element the *pair of supports* of Claim 1. None of the other Asserted Claims are infringed, for the same reasons that Claim 1 is not infringed.

[199] I therefore conclude that Molo has not met its onus to establish that any of the defendants has infringed the ’927 Patent. Molo’s action will therefore be dismissed.

D. *Validity*

[200] Chanel argues that all of the Asserted Claims of the ’927 Patent are either anticipated or rendered obvious by the prior art. It also argues that some of Mr. Hatch’s constructions of Claim 1 would, if adopted, render that claim and the other Asserted Claims, invalid for insufficiency and/or ambiguity.

[201] An issued patent is presumed to be valid absent evidence to the contrary: *Patent Act*, s 43(2). Chanel therefore bears the burden of establishing that the Asserted Claims are invalid for one or more of the reasons it gives.

[202] For the following reasons, I conclude that the Asserted Claims, except for Claim 3 and the remaining Asserted Claims as they depend from Claim 3, are invalid in light of the prior art, either for want of novelty (anticipation) or for want of inventiveness (obviousness).

(1) Anticipation

(a) Principles

[203] A patent claim is invalid for anticipation if the subject matter defined by it has been previously disclosed before the claim date (if the disclosure is by a third party), or more than a year before the filing date (if the disclosure is by the applicant), in such a manner that the subject matter became available to the public in Canada or elsewhere: *Patent Act*, ss 2("invention"), 28.2(1); *Eli Lilly Canada Inc v Novopharm Limited*, 2010 FCA 197 [*Lilly Olanzapine*] at paras 43–44, citing *Apotex Inc v Sanofi-Synthelabo Canada Inc*, 2008 SCC 61 [*Sanofi*].

[204] To constitute prior disclosure that invalidates a patent claim for anticipation, a prior art reference must (1) disclose subject matter which, if performed, would necessarily result in infringement ("disclosure"); and (2) provide enough information to enable the POSITA to perform the claimed invention without the exercise of inventive ingenuity or undue experimentation ("enablement"): *Sanofi* at paras 24–37; *Apotex Inc v Shire LLC*, 2021 FCA 52 [*Shire*] at paras 36–40; *Lilly Olanzapine* at paras 44–45; *Hospira* at para 66. If a published

reference fails to either disclose or enable the essential elements of a claim, the claim is not anticipated: *Shire* at para 36. The prior art is reviewed and understood as the POSITA would read and understand it: *Lilly Olanzapine* at para 44.

[205] The prior art disclosure must be a single publication that discloses each essential element of the claim, as it has been construed: *Sanofi* at para 28; *Eli Lilly Canada Inc v Mylan Pharmaceuticals ULC*, 2015 FC 125 at para 145; *Free World Trust* at para 26; *Whirlpool* at paras 43, 49(a)–(b). The disclosure need not be an exact description of the claimed invention, provided the POSITA, "trying to understand what the author […] meant," can understand the prior disclosure without trial and error: *Sanofi* at paras 23, 25, 32, citing *Synthon BV v SmithKline Beecham plc*, [2005] UKHL 59 at para 32. Nor does the prior disclosure have to disclose or teach only the subject matter of the later claim and no other subject matter; the question is whether it discloses subject matter which, if performed, would necessarily result in infringement of the claim: *Sanofi* at paras 21–25; *Swist v MEG Energy Corp*, 2021 FC 10 at paras 150–151, aff'd 2022 FCA 118 at paras 52–59, 67–68; *Schering-Plough Canada Inc v Pharmascience Inc*, 2009 FC 1128 at paras 67–72, 86–87; *Aux Sable Liquid Products LP v JL Energy Transportation Inc*, 2019 FC 581 at paras 90, 98.

[206] If the subject matter of the invention is disclosed, the POSITA is assumed to be willing to make trial and error experiments to get it to work, and may use their CGK to supplement the information in the prior art to this end: *Sanofi* at paras 27, 33, 37.

[207] In light of the parties' arguments regarding the four pieces of prior art alleged to anticipate, I consider it worth reiterating that the Asserted Claims of the '927 Patent are claims to an article, and not to the use of an article. No particular use of the article of *flexible furniture* is claimed in the '927 Patent. The claims may therefore be infringed by an article that is manufactured or sold, even if the article in question is never used or intended to be used as a *partition*, or never used at all. If that article is disclosed prior to the '927 Patent, then it may be an anticipatory disclosure.

[208] Put another way, in order to disclose subject matter that, if performed, would necessarily result in infringement of an Asserted Claim, and thereby anticipate it, the prior art must disclose an article that falls within the scope of the Asserted Claim by having all of its essential elements. These elements describe the physical attributes of the article or elements of the article, such as the *supports* providing *rigidity* to the *core* to provide a *freestanding wall*, or the article being capable of subdividing space. A piece of prior art that discloses an article that, to the understanding of the POSITA, would have these physical attributes will disclose the subject matter of the Asserted Claims, regardless of whether the prior art uses the particular words or descriptions used in the '927 Patent, or describes either the article as a whole or the attributes as being for a particular purpose.

[209] With these principles in mind, I turn to the prior art Chanel argues anticipate the Asserted Claims.

(b) US Patent 4,288,485 [Suominen]

[210] Issued in 1981, the Suominen patent is entitled “Tubular insulating curtain and method of manufacture”: Visser First Report, Appendix 15. Suominen discloses “collapsible and expandable tubular structures,” and more particularly a curtain, made from flexible strips of “thin-film material” made into tubular units by “bands of adhering contact”: col 1, ll 7–14. The curtains of Suominen are illustrated in Figure 3, which shows the curtain partially collapsed and partially expanded, and Figure 8, which shows the construction of the tubes:

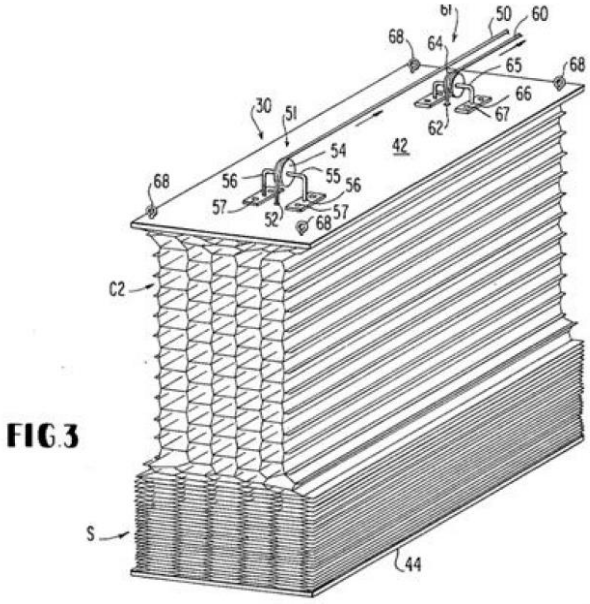


FIG.3

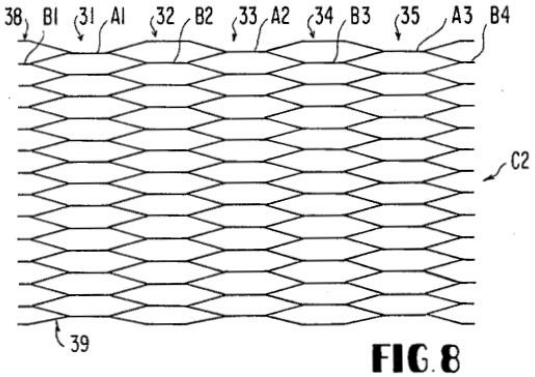


FIG.8

[211] Suominen describes the “curtain portion” (labelled C2) as made of tubes formed by applying offset or staggered adhesive bands (labelled A1, A2, A3, and B1, B2, B3) between superimposed strips of thin flexible material such as thin-film plastic (labelled 38, 39): col 1, l 59–col 2, l 30; col 5, l 43–col 6, l 8; col 8, ll 15–26. The end strips of the material may be pulled apart to expand the tubes or moved together to collapse them: col 2, 56–62. To facilitate manipulation, one end of the curtain may be secured to a mounting slat (the top slat labelled 42)

and the other to a second slat movable relative to the first (the bottom slat labelled 44), the slats being of a much more rigid material, such as wood or metal: col 2, ll 64–67; col 4, ll 44–57; col 6, ll 13–16. The tubular structure can be mounted, with or without supporting slats, in a number of positions for a variety of uses: col 3, ll 3–7. Curtains of varying height can be made by changing the number of strips of material: col 2, ll 37–39;col 3, ll 17–19.

[212] In providing a summary of the invention, Suominen states that the tubular structure disclosed has other applications:

> The tubular structure has many other applications, such as structural members for greenhouses and other buildings requiring the admission of large amounts of light and for modular structures utilizing flexible sheet material. The tubular units may be reinforced internally and positioned on end as self-supporting walls, folding doors and other structural components.
>
> [Emphasis added; Suominen, col 3, ll 39–45.]

[213] In setting out possible modifications or embodiments, Suominen describes varying the thickness of the adhesive bands, and spacing them at unequal distances to produce tubular cavities of varying shapes: col 9, ll 23–35. It also states that the uppermost and lowermost strips of the curtain may be made of "a sheet material thicker than the intervening strips forming the body of the curtain": Suominen, col 9, ll 58–60.

[214] Chanel contends, relying on Prof. Visser's evidence, that Suominen anticipates all of the Asserted Claims except Claim 3: Visser First Report, paras 113–117; Transcript, pp 783–785, 788, 866–877. With respect to Claim 1, Prof. Visser states that the POSITA would understand Suominen to disclose an article that is moveable, changeable, and capable of subdividing space;

that has a *core* formed from a plurality of *laminar panels* of a *flaccid material*, the adjacent faces of which are *inter-connected* to provide a *lattice structure* when pulled apart; and a *pair of supports* each connected to a face of the *core*, which are more rigid than the *panels* and provide *rigidity* to the *core*, to provide a *freestanding wall*: Visser First Report, para 116.

[215] Molo, relying on Mr. Hatch's evidence, argues that Suominen is not anticipatory prior art: Hatch Second Report, paras 61–96; Transcript, pp 1069–1073, 1079. In particular, Molo argues that Suominen describes a curtain intended to be installed as a fixture and does not disclose or enable a *partition* that is easily repositioned as an article of *flexible furniture*; a *freestanding wall*; a *pair of supports* that are *self-supporting* to provide *rigidity* to the *core*; or *supports* that are *flexible* and may be folded into a *tubular configuration*.

[216] I will address the essential elements of Claim 1 before turning to the dependent claims.

(i) Claim 1: An article of *flexible furniture* including a *partition*

[217] As set out above, the POSITA would understand this element of Claim 1 to mean an article (a physical object rather than a particular use of an article) of *flexible furniture* (a moveable and bendable object) that is or includes a *partition* (that can form a wall capable of subdividing spaces, but not necessarily taller than it is wide). In my view, Suominen discloses this element of Claim 1. It discloses a physical article the POSITA would recognize is moveable and bendable and that can form a wall capable of subdividing spaces and thus a *partition* within the meaning of Claim 1.

[218] Molo and Mr. Hatch contend that the POSITA would understand Suominen to be directed to a curtain, and not an article of *flexible furniture* including a *partition*, noting that the curtain of Suominen is intended to be installed as a fixture, such as by hanging it to an overhead structure such as a window frame: Hatch Second Report, paras 67–68. In my view, this argument mistakenly conflates an assessment of the article disclosed in Suominen with the question of its intended use. The issue for purposes of anticipation is whether Suominen discloses subject matter that would anticipate the claims. The article disclosed in Suominen (and claimed in Claim 5 of Suominen) can form a wall capable of subdividing spaces. What it is called—whether "curtain" or "partition"—does not change this. Nor does the fact that, if the article is manufactured and ultimately marketed as a curtain, the expectation is that the purchaser would fix it to a window frame. At the time it is manufactured (or, more to the point, at the time it is described in Suominen), it is an object, and one that can subdivide space.

[219] In any event, even if the intended use of the article were an essential element of Claim 1, Suominen specifically teaches that the "tubular units may be reinforced internally and positioned on end as self-supporting walls." I note that the POSITA reading this passage in Suominen would understand the term "self-supporting walls" to simply mean walls that are able to stand on their own, *i.e.*, in the sense that Claim 1 uses the term *freestanding*.

[220] Molo and Mr. Hatch argue that Suominen requires the tubular units to be "reinforced internally" before being used as self-supporting walls, unlike Claim 1 of the '927 Patent, so Suominen cannot be read as disclosing a *freestanding wall* or *partition* falling within Claim 1: Hatch Second Report, paras 73–76; Transcript, pp 1070–1072, 1124–1126. I disagree. A patent

claim encompasses any article that has the essential elements of the claim, even if the article also has additional elements, provided those additional elements are not excluded by the claim as purposively construed. Claim 1 does not preclude the use of internal reinforcement either expressly or implicitly. A *partition* will therefore fall within the scope of Claim 1 as long as it has the elements of the claim, regardless of whether it is internally reinforced or not. Reinforcing the tubular units of Suominen does not mean that the article, positioned on end as described in the patent, is not an article of *flexible furniture* including a *partition*. I will return to the question of internal reinforcement below in addressing Molo's arguments that it affects other elements in the claim, notably the need for *laminar panels* made of *flaccid material.*

[221] Mr. Hatch also asserts that Suominen only describes the curtain as being collapsed or expanded along one axis (*i.e.*, opening or closing the curtain), so the POSITA would not understand it to be "moveable and changeable": Hatch Second Report, paras 67, 70. Again, this fails to consider the article disclosed and how the POSITA would understand that article. Suominen expressly discloses that the cells or tubes in the structure are formed from thin flexible material: col 1, ll 61–63. The POSITA would immediately understand that an article made in this way from this material would be bendable and flexible, regardless of whether Suominen describes bending it in that way: Visser First Report, para 116 (p 53); Visser Third Report, paras 35–37. In other words, if the POSITA made the object described in Suominen, they would have made a moveable, bendable, changeable article of *flexible furniture* within the meaning of Claim 1.

[222] I am also satisfied that Suominen enables this element. Suominen provides extensive details regarding the manufacture of the structures. Further, while a particular use is not claimed in Claim 1 of the ’927 Patent, Suominen specifically discloses and enables the use of the tubular structures as a *partition* in the form of a self-supporting wall.

[223] Molo and Mr. Hatch assert that Suominen does not teach the POSITA how to internally reinforce the tubular units to make a self-supporting wall: Hatch Second Report, paras 73–74; Transcript, p 1071. Even if this mattered, or would be outside the POSITA’s knowledge, Suominen does in fact refer to reinforcement of the tube structure both through the use of the bands of contact (*i.e.*, the adhesive strips) and by reinforcing those bands of contact with longitudinal braces of resilient material along with the adhesive, as Mr. Hatch recognizes: col 5, ll 27–34; col 9, ll 20–23. While Mr. Hatch states that the POSITA would be unable to determine what form of reinforcement would be necessary to create this embodiment without undue trial and error, he provides no support for this assertion, which appears directly at odds with the description of the POSITA and their knowledge of materials and manufacturing techniques: Hatch Second Report, para 75. The POSITA with sufficient knowledge to practice the ’927 Patent, but without any knowledge of it, would be enabled by Suominen to follow its instructions, both in the making of the tubular structure and in positioning it on end to make a self-supporting wall.

(ii) having a *core* formed from a plurality of *laminar panels* of a *flaccid material* and each *panel* having a pair of oppositely directed major faces, *adjacent faces* of said *panels* being *inter-connected* to provide a *lattice structure* upon movement of abutting faces away from each other

[224] As set out above, the POSITA would understand the *partition* has a *core* made up of multiple *laminar panels* (sheet-like layers) made of *flaccid material* (softer and more pliant than merely *flexible*, and sufficiently soft and flexible to be suitable for use, but without imposing a requirement to bend sharply over short distances), whose *adjacent faces* are *inter-connected* so they form a *lattice structure* when pulled apart, such as through the use of offset vertical adhesive stripes (without excluding a lattice in which the width of inter-connection is wide enough that the resulting lattice cell or void can be described as hexagonal).

[225] The tubular structures of Suominen are described as being made from multiple strips of flexible thin-film material, which are bonded together through adhesive bands such that they expand into the structure seen in Figure 8 or, if pulled further apart, the structure seen toward in the expanded section of the article in Figure 3. I am satisfied that the strips of flexible thin-film material disclosed constitute *laminar panels* of a *flaccid material* within Claim 1, and that each strip or *panel* has a pair of oppositely directed major faces, the *adjacent faces* of which are interconnected to provide a *lattice structure* when the abutting faces are moved away from each other: Visser First Report, para 116 (pp 53–55).

[226] Mr. Hatch and Molo contend that Suominen does not disclose a *lattice structure* since the tubular structures it describes are hexagonal honeycomb structures rather than the diamond

shaped cells of the ’927 Patent: Hatch Second Report, paras 64(a), (d), 77–79. I have set out above at paragraphs [56] to [58] why I reject Mr. Hatch’s purported distinction between lattice structures with more hexagonal cells and those with a more diamond-shaped cells, and at paragraphs [99] to [103] why I reject his assertion that the ’927 Patent only claims lattices with diamond-shaped cells. I agree with Chanel that this distinction is unsupported by the ’927 Patent or the CGK, and appears to have been raised simply in an effort to distinguish prior art such as Suominen from the *lattice structure* of Claim 1. In any event, Suominen expressly states that the width of each band of adhesive can be varied by varying the thickness of the application wheels, and limits neither its disclosure nor its claims to tubes made with a particular thickness of adhesive: col 9, ll 33–35, Claims 1–5.

[227] Mr. Hatch also states that if the tubular structures are internally reinforced, as suggested in Suominen for use as a self-standing wall, then the *laminar panels* would no longer be formed of a *flaccid material*: Hatch Second Report, para 88(a). I am not persuaded. Even if the *laminar panels* are given some form of vertical reinforcement, such as longitudinal braces along with the adhesive as Suominen proposes, they remain strips (*laminar panels*) of a flexible thin-film material (*flaccid material*). There is nothing in Suominen that suggests that the reinforcement would result in increasing the rigidity to the extent that the material could no longer be described as *flaccid*. Nor is there anything in the ’927 Patent that requires the *laminar panels* to maintain a vertical flaccidity. To the contrary, the POSITA would recognize that the vertical strips of adhesive that provide the *lattice structure* give the *laminar panels* a degree of “inherent strength to resist much vertical collapse of the core”: Hatch First Report, para 79. Mr. Hatch’s approach appears to try to read Suominen around Claim 1 of the ’927 Patent, rather than attempting to

assess whether what is disclosed in Suominen would fall within the scope of Claim 1 as purposively construed.

[228] I am also satisfied that this element is enabled by Suominen, which teaches and claims methods of making the lattice material from sheets of thin-film material, although the POSITA would have been able to perform this aspect of Suominen based on their CGK in any event.

> (iii) a *pair of supports* at opposite ends of said *core* and *connected* to respective ones of said *faces*

[229] As discussed above, the POSITA would understand this element to claim two *supports*, one at each end of the *core* and connected to the outer face of the outermost panel of the *core*.

[230] Prof. Visser refers to two different aspects of Suominen in respect of this element: Visser First Report, para 116 (pp 55–58). The first is the slats depicted in Figure 3 and described as being of a much more rigid material, such as wood or metal: col 2, ll 64–67; col 4, ll 44–57; col 6, ll 13–16. The second is the reference to the uppermost and lowermost strips of the curtain being made "of a sheet material thicker than the intervening strips," which can provide reinforcement for the parts of the curtain subject to the greatest stress and wear and tear: col 9, ll 58–60. I agree that either of these approaches described in Suominen would fall within the definition of a *pair of supports* in Claim 1 of the '927 Patent, provided they meet the other elements of the claim. The slats of Suominen are clearly connected to the outermost face of the outermost strip or panel: col 2, ll 64–66. Similarly, if the outermost strips of the curtain are made

of a thicker material, they would necessarily be attached to the outermost strip of the thin-film material: col 9, ll 58–60.

[231] Mr. Hatch did not contend otherwise, focusing his discussion on the other characteristics of the *pair of supports* discussed below: Hatch Second Report, paras 80–86. I am satisfied that this element of Claim 1 is disclosed and enabled by Suominen.

> (iv) said *supports* being *self-supporting* to provide *rigidity* to said *core* to provide a *freestanding wall* whereby said *supports* may be moved apart to expand said *lattice* and extend the length of said *partition*.

[232] As discussed above, the POSITA would understand this element to mean the *supports* of Claim 1 must be *self-supporting* (but not in the sense of being able to stand on their own) to provide *rigidity* to the *core* (and thus being more rigid than the *core* and potentially fully rigid, being made of more rigid material than the *flaccid material* of the panels), such *rigidity* resulting in the *supports* and *core* resisting collapse of the *core* so as to be a *freestanding wall* (able to stand on its own under its own weight) when the *supports* are pulled in opposite directions to expand the *lattice*.

[233] Prof. Visser contends that the POSITA would understand that either the slats or the thicker outermost layer of sheet material described in Suominen would be made of more rigid material than the flexible thin-film material and would thus provide *rigidity* to resist collapse and allow the *supports* and *core* to stand as a *freestanding wall* when expanded: Visser First Report, para 116 (pp 58–60). He notes that the POSITA would understand that the curtain pictured in

Figure 3, which includes the slats and the *core* (the "curtain portion") would form a *freestanding wall* when placed on its side, particularly since it is described as being 5 inches wide, with slats about 8 inches wide: col 6, l 66–col 7, l 5.

[234] Mr. Hatch asserts that neither the slats nor the thicker outermost layers in Suominen are designed for the same purpose as the *supports* of the '927 Patent, since the slats are meant to facilitate manipulation of the curtain, and the thicker layers to resist wear and tear: Hatch Second Report, paras 83, 85–86. I have addressed the "different purpose" question above. The question is whether Suominen discloses subject matter, in the form of an article, that falls within the scope of Claim 1, not the intended purpose of the article or any given element of it. If a slat designed to facilitate manipulation, or a thicker layer designed to resist wear and tear, also provides *rigidity* to the *core* to resist collapse when the article is used as a *partition*, the article has the physical attributes of Claim 1 and meets this element of the claim. Were it otherwise, a potential infringer could make a *partition* that falls within Claim 1 yet avoid infringement simply by asserting that the *supports* were intended to assist manipulation rather than supporting the *core*. This would be contrary to the principle that the intention of an infringer is irrelevant to the issue of infringement.

[235] Mr. Hatch also claims the POSITA would understand that the bottom slat would have to weigh "a considerable amount" for the curtain to expand using the force of gravity, and that the slat would therefore cause the *core* to collapse rather than allowing it to form a *freestanding wall*: Hatch Second Report, paras 82(a), 83–84. Again, I view this as an attempt to read into

Suominen matters that are not found in it, in order to distinguish the article described in Suominen from that in Claim 1.

[236] Notably, Mr. Hatch's assertion that a curtain made of flexible thin-film material would require a considerable weight to expand under gravity, and that only the slat would provide that weight, appears contrary to basic physics. The weight of the curtain would itself assist in causing the bottom of the curtain to drop under the force of gravity. While this would be self-evident to the POSITA, Suominen itself states that the "tube material should also be sufficiently flexible for the tubes to fully expand under their own weight and the weight of the lower slat": col 5, ll 20–24. Further, Suominen proposes that the curtain be used "with or without supporting slats," indicating that the curtain can be opened without the addition of a weighty support: col 2, l 64–col 3, l 7. There is no indication in Suominen that the slat needs to be particularly heavy, and the POSITA would recognize that given the flexible thin-film material that makes up the core, no such heavy slat would be necessary.

[237] Mr. Hatch also states that it is unclear from Suominen that the "sheet material thicker than the intervening strips forming the body of the curtain" would provide *rigidity* to the *core*: Hatch Second Report, paras 82(b), 86. I agree with Prof. Visser that the POSITA would understand from this disclosure that the increase in thickness—which is expressly stated to provide "reinforcement"—would be more rigid than the intervening strips and thus add *rigidity* to them: Visser First Report, para 116 (pp 57–58). In this regard, I agree with Chanel that Mr. Hatch's claimed uncertainty about whether the thicker sheet material of Suominen would provide *rigidity* to the *core* is in stark contrast with his willingness to assert that the final sheet of

tissue paper in the Chanel Products provides *rigidity* to the *core*, despite being made of the same *flaccid* material as the rest of the *core*.

[238] I am satisfied based on Prof. Visser's evidence and my review of Suominen that the POSITA would understand that the disclosed curtains of Suominen, either with the disclosed slats or with the disclosed thicker sheet material, would act as a freestanding wall when expanded and placed on their side. In reaching this conclusion, I do not rely on Prof. Visser's evidence demonstrating that another honeycomb blind of two-cell thickness is freestanding when placed on its end. The blind used in Prof. Visser's demonstration has considerably wider and deeper end slats that do not provide a helpful basis for comparison to the blinds of Suominen. I also do not rely on Prof. Visser's side-by-side comparison of Figure 5(a) of the '927 Patent with Figure 2 of Suominen rotated onto its side. While that comparison shows similarities in the *core*/*support* structure of the two articles, it does not itself demonstrate that the curtain of Suominen would freestand. Nonetheless, the POSITA would understand from the physical structure of the curtain of Suominen, read in light of their CGK, that a curtain with the form of that disclosed in Suominen would stand when place on its side. This understanding would be reinforced by Suominen's own discussion of doing so.

[239] Again, the POSITA would be enabled to perform this aspect of Suominen given the clear directions in Suominen regarding the use of more rigid slats or outer strips formed of sheet material thicker than the remainder of the panels. The POSITA would be readily able to follow the teaching of Suominen to position the tubular structure on end to form a self-supporting wall, using their CGK to adjust aspects such as the width of the wall to ensure it was self-supporting.

[240] I am therefore satisfied that Suominen discloses all of the essential elements of Claim 1 of the ’927 Patent. The POSITA would be enabled by Suominen and their CGK to implement all of these essential elements and thereby perform the invention of the ’927 Patent. Suominen anticipates Claim 1 and renders it invalid.

(v) Claim 2: *supports* that are *flexible* and may be folded into a *tubular configuration*

[241] Chanel recognizes that the rigid slats of the curtain in Figure 3 of Suominen do not fall within Claim 2 of the ’927 Patent. However, it contends that the disclosed curtain made with the outermost strips being of a “sheet material thicker than the intervening strips forming the body of the curtain” discloses *supports* that are more *rigid* than the *core* but still *flexible* to be folded into a *tubular configuration*: Visser First Report, para 117 (p 61). Mr. Hatch does not suggest otherwise, relying on his conclusion that the thicker outermost strips are not *supports* and that the slats are rigid: Hatch Second Report, paras 91–92; Transcript, pp 1072–1073.

[242] I am satisfied that the curtain of Suominen, made as disclosed with outermost strips of a sheet material thicker than the intervening strips, would have *supports* that provide *rigidity* to the *core* and yet retain some flexibility. These thicker outermost strips are described in contrast to the rigid slats and the POSITA would understand them to be more rigid than the thin-film strips, but more flexible than the rigid slats. Such strips would be *flexible* within the meaning of Claim 2, and could be folded into a *tubular configuration.* The subject matter of Claim 2, including the essential elements of Claim 1, is therefore disclosed in Suominen. The POSITA

would be enabled to make the described curtain of Suominen, which would also have the physical attributes of the *partition* of Claim 2.

[243] It is important to again underscore that Claim 2 does not require that the *supports* actually be folded into a *tubular configuration*. Suominen does not disclose such folding. Rather, the *supports* need only be *flexible* such that they "may be" folded into such a configuration. By drafting Claim 2 in this way, the inventors claimed a broader range of potentially infringing articles. However, in doing so they also claimed subject matter in the prior art.

(vi) Claim 5: *lattice structure* that defines voids oriented on the *longitudinal axis*

[244] As illustrated in Figure 3, the voids in the *lattice structure* in the curtain of Suominen is oriented along the longest axis of the thin-film strips. I therefore agree with Prof. Visser that on either construction of *longitudinal axis*, Suominen discloses and enables the additional limitation of Claim 5: Visser First Report, para 117 (p 61). Mr. Hatch's only basis for asserting that Suominen did not disclose the subject matter of Claim 5 is that the POSITA would not understand the hexagonal voids of Suominen to be a *lattice structure* within the meaning of the '927 Patent: Hatch Second Report, para 93. I have given my reasons for rejecting this distinction above.

(vii) Claim 6: *laminar panels* formed from paper

[245] Prof. Visser asserts that Suominen discloses the use of paper for the material of the *core*: Visser First Report, para 117 (p 62). I disagree. The reference Prof. Visser makes is to a passage

in Suominen that discusses a prior art "beehive like wall structure" made by gluing thin plates of paper to each other. Suominen does not, however, specifically propose using paper to make the curtains it discloses, *i.e.*, the structures that have all the other elements of Claim 1. Rather, Suominen describes the strips as being made of "thin-film material, preferably thin sheets of plastic": col 5, ll 17–26; col 7, ll 14–15. While this raises issues of obviousness, discussed below, I agree with Mr. Hatch that Suominen does not itself disclose the subject matter of Claim 6 and thus does not anticipate this claim: Hatch Second Report, paras 94–95.

(viii) Claim 7: *laminar panels* formed from a *non-woven material*

[246] Conversely, given the same aspects of Suominen referred to in the preceding paragraph, I agree with Prof. Visser that it discloses the use of *laminar panels* that are formed from a *non-woven material* such as a plastic: Visser First Report, para 117 (p 62). Mr. Hatch does not contend otherwise. Suominen discloses and enables the additional limitation of Claim 7.

(ix) Claim 13: *supports* formed from a *non-woven material*

[247] Prof. Visser opines that the POSITA would understand the "sheet material thicker than the intervening strips" used for the outermost strips (and thus meeting the definition of *supports*) would be understood to be made of a plastic sheeting akin to that used for the *core* and thus formed from a *non-woven material*: Visser First Report, para 117 (p 63). Mr. Hatch did not disagree, raising only the assertion that these outermost strips do not constitute *supports*, which opinion I have rejected above: Hatch Second Report, para 96. I am satisfied Suominen discloses

the use of a *non-woven material* for the *supports* and that the POSITA would be enabled by this disclosure to perform Claim 13 of the ’927 Patent.

(x) Claims 14 to 17: dimensions

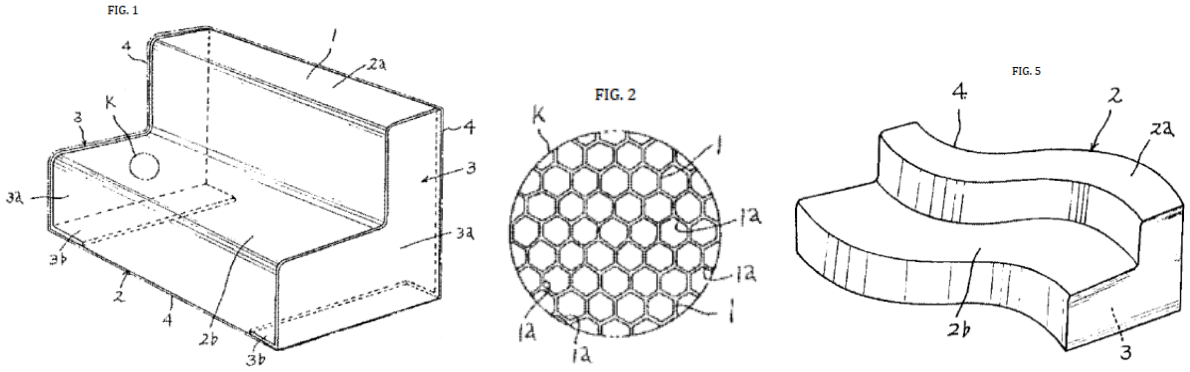
[248] Prof. Visser sets out the reasons for which the dimensions of the strips of the curtains of Suominen, as the POSITA would understand them, fall within the dimensions of the *laminar panels* claimed in Claims 14 to 17 of the ’927 Patent: Visser First Report, para 117 (pp 63–64). Mr. Hatch took no issue with Prof. Visser’s conclusions on these limitations. I am satisfied, based on Prof. Visser’s evidence and my reading of Suominen, that Suominen discloses and enables subject matter that falls within the dimensional limitations of Claims 14 to 17.

[249] I therefore conclude that Chanel has met its onus to demonstrate that the Suominen patent anticipates Claim 1; Claim 2; Claim 5 as it depends from Claims 1 or 2; Claim 7 as it depends from Claims 1, 2, or 5; Claim 13 as it depends from Claims 1, 2, 5, or 7; and Claims 14 to 17 as they depend from any of the foregoing claims. These claims are invalid as not claiming novel subject matter.

(c) Japan Patent JP H2-33654 [Harada]

[250] Published in 1990, the Harada patent is entitled “Expandable and Bendable Chair or Table”: Visser First Report, Appendices 16, 17. It discloses and claims an expandable and bendable chair, sofa, or table consisting of a honeycomb structure made of a large number of vertically-oriented tube bodies of bendable material (*e.g.*, paper, plastic, aluminum, or

cardboard) between two optional "L-shaped" plates, which are joined to the sides to improve stability: pp 1–6 (translation). Relevant features of the chair or sofa of Harada are illustrated in the following Figures 1, 2, and 5 from the application:



[251] The seat portion (labelled 2b in Figures 1 and 5) and backrest portion (labelled 2a) of the sofa are made of honeycomb tubes seen in Figure 2. The optional end plates (labelled 3) have a vertical plate portion (labelled 3a) and a horizontal plate portion (labelled 3b) that tucks under the body of the sofa such that the plate is "L-shaped": pp 3–4 (translation). The ends of the chair can be pulled apart, causing the honeycomb, and thus the sofa, to expand, or they can be brought close together to minimum size for storage: pp 2–4 (translation). Harada states that instead of a sofa, the structure may be a chair of another shape, or a stand for placing an object on, or another appropriate article: p 5 (translation).

[252] Prof. Visser contends that Harada anticipates Claim 1 of the '927 Patent since it discloses an article of *flexible furniture* including a *partition* that can subdivide space, with a *core* made of a plurality of *laminar panels* (the honeycomb structure), a *pair of supports* that provide rigidity to the *core* (the L-shaped plates) to provide a *freestanding wall* when expanded (either in the form of an expanded sofa or the alternative stand for placing objects): Visser First Report,

para 119; Transcript, pp 788–790; 856–859. In particular, he contends that the POSITA would understand that the tubes of the honeycomb structure, made of "bendable material" such as paper, plastic, or aluminum, can be made by gluing multiple layers of planar material such as paper together in offset bands: Visser First Report, para 119 (pp 65–66).

[253] Mr. Hatch disagreed, asserting that the sofa of Harada is not a *partition* and only incidentally subdivides space; that Harada does not state that the honeycomb structure of tubes is made from multiple layers of planar material; that the honeycomb structure is hexagonal rather than a *lattice structure*; that the plates are said to provide stability, not *rigidity*, with an L-shape needed for the purpose such that they do not disclose *supports* more generally; and that neither the sofa nor the alternative stand is a *wall*: Hatch Second Report, paras 100–110; Transcript, pp 1073–1074.

[254] I agree with Prof. Visser that Harada discloses an article of *flexible furniture* that includes a *partition*. Claim 1 of the '927 Patent does not limit the article of *flexible furniture* to only being a *partition*. To the contrary, it expressly claims an article of *flexible furniture* including a *partition*. The fact that an article may serve multiple functions (*e.g.*, it can both subdivide space and be sat upon) does not bring it out of the scope of Claim 1. The sofa of Harada includes a *partition* in the form of, at least, its backrest, which is clearly just as capable of forming a wall that can subdivide space and of acting as a *freestanding wall* as the examples of low walls given in the '927 Patent. I also reject Mr. Hatch's assertion that the L-shaped plates of Harada do not constitute *supports* that add *rigidity* to the *core*. Claim 1 places no limits on the shape of the *supports* or the amount of stability they provide, as long as they add *rigidity* to the *core* to

provide a *freestanding wall*. As discussed above, and for the same reasons, I also reject Mr. Hatch's distinction between hexagonal and other *lattice structures* and agree with Prof. Visser that the *core* of the sofa of Harada is a *lattice structure*.

[255] However, having considered the experts' evidence and reviewing the Harada reference through the eyes of the POSITA with their CGK, I conclude that Harada does not disclose a *core* formed from a plurality of *laminar panels*. I accept that the POSITA would be aware of honeycomb paper, and I therefore accept Prof. Visser's view that the POSITA would understand from their CGK that honeycomb structures "can be" made from a process of using sheets of paper or other laminar material glued together with offset stripes of adhesive. This may be relevant to an obviousness analysis. However, there is no evidence that this is the only method of making such a honeycomb structure such that the POSITA would understand disclosure of a "honeycomb structure" as itself disclosing the use of *laminar panels* to form that structure. Despite Prof. Visser's colourized version of it, the honeycomb shown in Figure 2 of Harada does not show that the honeycomb structure is made from multiple laminar sheets, as the lines showing the cell walls do not show the linear continuity that would illustrate a *laminar panel* (such as is seen and described in Suominen and the '927 Patent): Visser First Report, para 119 (p 66–67). Nor does the text of the patent disclose or discuss this manner of making the honeycomb.

[256] I therefore conclude that Harada does not disclose a *core* formed from a plurality of *laminar panels* of a *flaccid material*, as required by Claim 1 of the '927 Patent. As a reference

must disclose each essential element of the challenged claim to be anticipatory, I conclude that Harada does not anticipate Claim 1 or any claim of the ’927 Patent.

(d) Soft Housing, Forsythe + MacAllen Design [Soft Housing]

[257] The Soft Housing reference is Ms. Forsythe and Mr. MacAllen’s submission to the Design Beyond East and West [DBEW] International Design Competition, which was submitted in September 2003 and published and exhibited as the winner of the Golden Prize (second place) in early 2004, more than a year before the ’927 Patent was filed in November 2005: Exhibits 2, 6, 7; Visser First Report, Appendix 18; Transcript, pp 123–124, 130–134. Described by Ms. Forsythe as showing early prototypes of softwall and softblock, the Soft Housing reference is a five-page submission with photographs and text discussing the concept of using flexible textile honeycomb structures as expandable walls: Transcript, p 128. The submission refers to the “Soft Wall system” and shows a number of structures, including bedrooms and partition walls of honeycomb paper that “can be opened freely in any direction”: pp 1, 3. It includes a series of pictures showing Ms. Forsythe opening a tall blanket of honeycomb tissue into a wall, with shorter expanded blocks of honeycomb tissue appearing on the floor in the background: p 4.

[258] One of the elements illustrated in the Soft Housing submission is a room created within a larger space by expanding a large square of honeycomb to create a floor, walls, and a ceiling. The honeycomb is anchored at one end to a “plywood cabinet,” while the other end has a “facing panel of rigid honeycomb” with a sliding or folding door: p 3.

(i) Claim 1

[259] In Prof. Visser's opinion, the Soft Housing reference discloses and enables all of the elements of Claims 1: Visser First Report, para 122; Transcript, pp 790–791, 860–866. In particular, he asserts that the POSITA would understand the room with the "plywood cabinet" at one end and the "facing panel of rigid honeycomb" at the other would be (i) an article of *flexible furniture* including a *partition*; (ii) having a *core* formed from a plurality of *laminar panels* of a *flaccid material* that are *inter-connected* to provide a *lattice structure* when moved apart; (iii) a *pair of supports* at opposite ends of and *connected to* the *core*; and (iv) the *supports* being *self-supporting* to provide *rigidity* to the *core* to provide a *freestanding wall* when the *supports* are moved apart to expand the *lattice*.

[260] I agree. The POSITA reviewing the Soft Housing reference, and in particular the internal room structure, would see an article of moveable and bendable *flexible furniture* that includes several *partitions* that can form walls capable of subdividing spaces, which have a *core* made of multiple sheet-like *laminar panels* of a *flaccid material* whose adjacent faces are *inter-connected* that create a *lattice structure* when pulled apart. The *partition* has rigid *supports* at each end (the plywood cabinet and the facing panel), which provide *rigidity* to the *core* to resist collapse and allow the formation of *freestanding walls* able to stand under their own weight when the *supports* are pulled apart to expand the *lattice*. Contrary to Mr. Hatch's arguments, discussed below, the POSITA reviewing the Soft Housing reference would see disclosure of an article of furniture comprising each element of Claim 1, and would be enabled to create such an article of furniture and thereby practice Claim 1 of the '927 Patent.

[261] Mr. Hatch raises five elements of Claim 1 he says are not disclosed or enabled by the Soft Housing reference. First, he claims the POSITA would not understand the reference to disclose a *flexible* structure that is moveable and changeable, since the Soft Housing structures are only depicted as being reliant on an external structure. He points in particular to a series of four photographs of Ms. Forsythe opening a tall blanket of honeycomb tissue into a wall, stating that he was informed that these prototypes were "incapable of remaining vertical without further support" and that they are pictured with a person holding them up: Hatch Second Report, paras 118–119.

[262] I reject this argument for several reasons. Most importantly, it is not this series of photographs that discloses a structure with all of the elements of Claim 1. Neither the tall nor the shorter structures in the photographs show a *pair of supports*. It is therefore immaterial whether the tall wall in the photographs could remain vertical. In any event, the assessment of anticipation must be made on the face of the document as it would be understood to the POSITA. Any external knowledge that Mr. Hatch may have been given regarding the photographs cannot be considered. The document itself describes the blankets of honeycomb tissue "being opened up into walls," which the POSITA would understand to mean that the opened honeycomb tissue could and did stand as walls.

[263] Even if external evidence of the photographs could be considered, Ms. Forsythe's evidence was that the walls could "stand there temporarily" but that they were not "freestanding as a functional wall" since they were vulnerable to being tipped over or knocked over and were not stable enough to "go out into the world": Transcript, pp 130, 311–312. There is no

requirement of any particular level of stability in Claim 1 beyond the requirement of being *freestanding*, in the sense of being able to stand on its own under its own weight. On Ms. Forsythe's own evidence, the taller walls of honeycomb paper did just that, as the photographs and caption indicate they did. Further, the photographs also show two other shorter lower units of expanded honeycomb that are very clearly standing independently as short walls.

[264] Second, Mr. Hatch refers to the requirement in Claim 1 for the *laminar panels* to be made of a *flaccid material*. Here, he relies on Prof. Visser's definition of *flaccid material* as requiring that the material be "easily bent sharply." He contends that the material in the Soft Housing reference is described as having "shape memory," which the POSITA would understand to mean that it returns to its original fabricated state and thus resists being "easily bent sharply": Hatch Second Report, paras 121–122. I cannot accept this contention. I note that Mr. Hatch's definition of "shape memory" is contrary to the very article he cites for it, which requires the materials to recover their original, permanent shape "only on exposure to an external stimulus": Hatch Second Report, Exhibit NN. There is no indication in the context of the Soft Housing reference that the material being used, described as a "nonwoven, paper-thin type of textile," could not be easily bent sharply. In any case, I have rejected above Prof. Visser's construction of the term *flaccid material* as including a requirement that the material be easily bent sharply. The material shown in the Soft Housing reference for the *laminar panels* is clearly a *flaccid material* that is softer and more pliant than being merely *flexible*.

[265] Third, Mr. Hatch asserts that the requirement of Claim 1 that the *adjacent faces* of the *laminar panels* be *inter-connected* to provide a *lattice structure* would not be enabled by the

Soft Housing reference. This opinion is based on his view that the POSITA would not be familiar with honeycomb paper or how to make it, and the fact that the Soft Housing reference does not explain how to make a *core* of this nature: Hatch Second Report, paras 123–124. Again, I disagree. I have concluded above that the POSITA would have knowledge of honeycomb paper and a basic understanding of how it is made. In any event, the Soft Housing reference includes close-up views of the honeycomb structure, which would allow the POSITA with knowledge and experience in industrial design, including the "general principles of production techniques used in the manufacture of products utilizing flexible materials," to understand and be able to reproduce its structure: Hatch First Report, para 35. The POSITA reviewing the Soft Housing submission would be enabled to create the structures disclosed therein without inventive ingenuity and without undue burden.

[266] Fourth, Mr. Hatch contends that the plywood cabinet referred to in the Soft Housing submission cannot constitute a *support* that is *self-supporting*, since it is "depicted as attached to the surrounding wall, with the flexible structure anchored to it, to resist the pulling force when opening the Soft Housing […] structure" [footnote omitted]: Hatch Second Report, paras 125–126. It is difficult to know what Mr. Hatch is referring to. As Prof. Visser points out, nothing in the Soft Housing document shows the cabinet as attached to the surrounding wall: Transcript, pp 861–862. It is located against the wall, and is described as a cabinet, but I agree with Prof. Visser that the POSITA would understand that the disclosed cabinet could stand on its own and need not be physically attached to a wall: Transcript, pp 862–863. Being made of plywood and paper, the POSITA would understand that the disclosed structure is moveable as a piece of furniture. There is also no reference at all to the cabinet being attached to the wall "to resist the

pulling force when opening" the structure, as Mr. Hatch asserts. To the contrary, the document states that the "bedrooms and partition walls can be opened freely in any direction": p 3.

[267] While the use of a cabinet as a *support* that is *self-supporting* is different from the use of felt or other materials discussed in the '927 Patent, Claim 1 is not limited to any particular type of *support*, provided it is more rigid than the *laminar panels* to provide *rigidity* to them to provide a *freestanding wall*. That the *support* might have an additional function, such as acting as a cabinet, does not change its nature as a *support*. Nor does it remove the article from the scope of being an article of *flexible furniture* including a *partition*. The cabinet with attached expandable walls that create a room disclosed in the Soft Housing submission is just such an article of *flexible furniture* including a *partition* that subdivides space.

[268] Finally, Mr. Hatch contends that the Soft Housing reference does not disclose a *freestanding wall*. This contention is based on the same argument above about the cabinet being attached to the wall: Hatch Second Report, para 127. I reject it for the same reason.

[269] Molo argues that to the extent that the Soft Housing submission discloses and enables the essential elements of Claim 1, the disclosure was part of the reasonable experimentation process in developing the invention. It argues that such experimentation does not rise to the level of public disclosure, relying on this Court's decision in *Bombardier Recreational Products Inc v Arctic Cat Inc*, 2017 FC 207 at paras 491–492, 581–584, rev'd on other grounds 2018 FCA 172, leave to appeal ref'd 2019 CanLII 42339 (SCC), citing *Conway v Ottawa Electric Railway Co*, 1904 CanLII 200 (CA EXC) and *Bayer Inc v Apotex Inc*, 2014 FC 436.

[270] I cannot agree. As Justice Roy noted in *Bombardier*, the exception described in *Conway* requires that the experimentation be "reasonable and necessary for the purpose of perfecting and testing": *Bombardier* at para 491. It typically involves a limited or temporary experimentation in public where such experimentation is necessary to achieve the invention, such as the testing of prototype snowmobiles on trails accessible to the public that might theoretically have provided (non-enabling) disclosure of a rider configuration (*Bombardier* at paras 581–583); confidential clinical studies of a pharmaceutical that might theoretically result in unreturned tablets being analyzed (*Bayer* at paras 119–122); a feeder built for experimentation in a protected area of a farm that might have been viewed by the oil delivery man (*Hi-Qual Manufacturing Ltd v Rea's Welding & Steel Supplies Ltd*, [1994] FCJ No 261 (TD) at paras 46–51, aff'd [1995] FCJ No 727 (CA)); or tests of snow ploughs for streetcar tracks that were necessarily conducted on public tracks to perfect their use (*Conway* at pp 439–444).

[271] In the present case, there is simply no evidence on which the Court can conclude that the submission of the Soft Housing document to a competition committee, and its subsequent publication as a winning entry in that competition, constituted reasonable and necessary experimentation. Indeed, there is no indication that the submission to the competition was itself experimentation at all, or that it was done to improve or perfect the invention. In this regard, it is important to note that the *Conway* exception requires that the public disclosure itself be for the purposes of experimentation, not simply that the inventors chose to disclose publicly something that they viewed to still be at an experimental stage: *Conway* at pp 442, 444; *Bombardier* at paras 491, 582; *Bayer* at para 119. Here, the inventors disclosed the invention in Claim 1 more than a year before they filed for a patent, and did not do so for experimental purposes but for the

purposes of an international design competition. The experimental exception to disclosure described in *Conway* does not apply.

[272] I therefore conclude that Chanel has satisfied its onus to demonstrate that each of the essential elements of Claim 1 are disclosed and enabled by the Soft Housing submission, and thus anticipated by that prior art document.

(ii) Dependent Claims 5, 6, 7, and 14

[273] Prof. Visser opines that in addition to the essential elements of Claim 1, the Soft Housing submission discloses the limitations of Claim 5 (voids oriented on the *longitudinal axis*); Claim 6 (*laminar panels* formed from paper); Claim 7 (*laminar panels* formed from a non-woven material); and Claim 14 (*laminar panels* with a major dimension of between 0.5 and 3 metres): Visser First Report, para 123. Neither Mr. Hatch nor Molo raises any issue with respect to Prof. Visser's conclusions on these dependent claims. Based on Prof. Visser's evidence and my review of the Soft Housing submission, I agree that it equally discloses and enables these limitations and thus anticipates these claims.

[274] I therefore conclude that Chanel has met its onus to demonstrate that the Soft Housing submission anticipates Claim 1; Claim 5 as it depends from Claim 1; Claim 6 as it depends from Claim 1 or 5; Claim 7 as it depends from Claim 1 or 5; and Claim 14 as it depends from Claims 1, 5, 6 or 7. These claims, most of which overlap with those I have found anticipated by Suominen, are invalid as not claiming novel subject matter.

(e) Japan Patent Application S49-87173 A [Okuno]

[275] Published in 1974, Okuno is an unexamined patent application entitled “Collapsible Shade”: Visser First Report, Appendices 19, 20. It discloses and claims a collapsible lampshade consisting of two “substrates” with a honeycomb lattice between them, the whole having a cavity cut in it to house a lightbulb: cols 1–3 (translation). Relevant features of the lampshade of Okuno are illustrated in Figures 1, 4 and 5, reproduced below:

FIG. 1

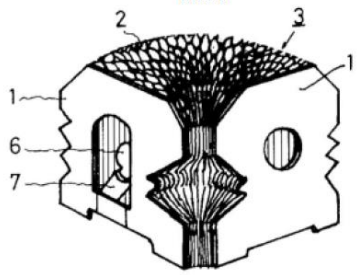


FIG. 4

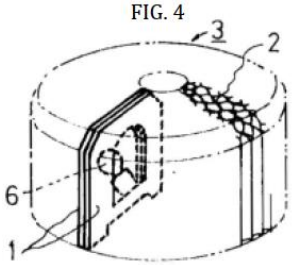
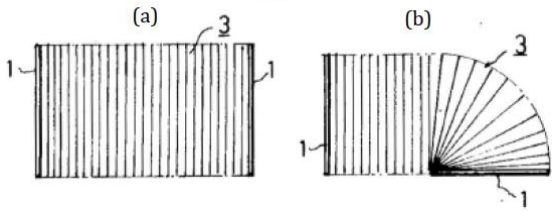


FIG. 5



[276] Okuno describes the substrates (labelled 1) as being made of cardboard, a hard synthetic resin, an aluminum plate, or plywood: col 2 (translation). The main body of the shade (labelled 3) is an expandable layer made of a large number of sheet bodies of paper, a synthetic resin, or the like, “adhered in a zigzag manner,” that can be deployed in a honeycomb shape when pulled open: cols 1–2. Each proximal end of the expandable layer is fixed to the inner face of one substrate: col 1. The shade can be pulled into a cylindrical shape and fastened together with an appropriate fastener, as seen in Figure 4: col 2. Rectangular shapes or U-shapes like those seen in Figure 5 are also proposed by pulling the main body into these shapes and fixing the substrates to a wall face or desktop: col 3.

[277] According to Prof. Visser, the POSITA would understand the lampshade of Okuno to be (i) an article of *flexible furniture* including a *partition* (moveable, changeable, and capable of subdividing a space); (ii) having a *core* (the main body of the shade) formed from a plurality of *laminar panels* of a *flaccid material* that are *interconnected* to form a *lattice structure* when moved apart (the paper or synthetic-resin honeycomb); (iii) a *pair of supports* at opposite ends of and *connected to* the *core* (the cardboard or hard synthetic resin substrates); (iv) the *supports* being more rigid than the *core* and thus being *self-supporting* to provide *rigidity* to the *core* to resist collapse and provide a *freestanding wall* when the *supports* are moved apart: Visser First Report, para 125; Transcript, pp 764–767, 791. Prof. Visser also contends that Okuno discloses the limitations in dependent Claim 2 (*flexible supports* that may be folded into a *tubular configuration*); Claim 3 (*fasteners* to maintain said *tubular configuration*); Claim 5 (*voids* oriented on the *longitudinal axis*); Claim 6 (*laminar panels* formed from paper); and Claim 7 (*laminar panels* formed from *non-woven material*).

[278] I agree with Mr. Hatch that the POSITA would not understand Okuno to disclose an article of *flexible furniture* including a *partition*, *i.e.*, one that includes a wall capable of subdividing spaces: Hatch Second Report, paras 131–133, Transcript, pp 1077–1079. The lampshade of Okuno would be understood to be of modest size, given the illustration showing the relative size of a lightbulb. Prof. Visser did a mockup showing that this might result in the lampshade of Okuno being as much as about 30 centimetres high, similar to some of the Chanel Products: Visser Third Report, para 28; Exhibit 78. This led him to suggest Mr. Hatch was inconsistent in considering the 30 centimetre high Chanel Products to be a *partition* but not the equally tall Okuno lampshade, and to argue that the use of the term “wall” led to insufficiencies

since the ’927 Patent did not disclose “what is and what is *not* a wall” [emphasis in original]: Visser Third Report, paras 26–29.

[279] In my view, as discussed above, height is not the only dimension that would be relevant to the POSITA in assessing whether a particular structure is a *partition* that can subdivide spaces. A narrow freestanding lamp or pillar may be 2 metres tall, but the POSITA would not consider it to “subdivide space” in any but a trivial sense and would not consider it a *partition*. Similarly, a structure that is 30 centimetres high but extendible to 3 metres in length (like the Chanel Products) may subdivide space in a way that a structure that is 30 centimetres high and 50 centimetres long may not (my approximation of the dimensions of the Okuno lampshade when extended, based on Figure 5(a) and Prof. Visser’s 30 centimetre estimate of height). Unlike the curtains of Suominen, which are designed to cover windows that may be of significant size, there is no teaching in Okuno that the lampshade could be made longer as desired.

[280] I will address further below Prof. Visser’s contention (and Chanel’s argument) that Claim 1 is insufficient or ambiguous. However, for purposes of the anticipation analysis, I am not persuaded that a POSITA would understand Okuno to disclose an article of furniture that includes a *partition* in the sense of a wall capable of subdividing space. As it does not disclose subject matter which, if performed, would result in infringement of Claim 1, it does not anticipate Claim 1 or any other claim of the ’927 Patent.

[281] While this is dispositive of the anticipation arguments in respect of the dependent claims as well, I note that even if one accepts the “cardboard” of Okuno as being sufficiently *flexible*

that it can be folded into a *tubular configuration* (Claim 2), there is nothing in Okuno that discloses *fasteners* on the *supports* to maintain said *tubular configuration* (Claim 3). Prof. Visser relies on the reference in Okuno to fasteners to hold the lampshade in the cylindrical configuration shown in Figure 4: Visser First Report, para 126 (p 89). However, this configuration is not the *tubular configuration* discussed and claimed in the '927 Patent, which involves folding a single *support* in on itself, not connecting it to the other *support*: '927 Patent, paras 23, 28, Figure 5. As Prof. Visser conceded in cross-examination, Okuno does not propose this *tubular configuration*: Transcript, pp 853–856. There is therefore nothing in Okuno to suggest that the fasteners it refers to would be configured so as to maintain the *supports* in the *tubular configuration*, as required by Claim 3.

(f) Conclusion on anticipation

[282] For the foregoing reasons, I conclude that the following claims are invalid for having been anticipated by Suominen, the Soft Housing submission, or both:

Claim 1
Claim 2
Claim 5 as it depends from Claims 1 or 2
Claim 6 as it depends from Claims 1 or 5 (depending from Claim 1)
Claim 7 as it depends from Claims 1, 2, or 5 (depending from Claim 1 or 2)
Claim 13 as it depends from Claims 1, 2, 5, or 7 (on the foregoing dependencies)
Claim 14 as it depends from Claims 1, 2, 5, 6, 7 or 13 (on the foregoing dependencies)
Claim 15 (on the foregoing dependencies of Claim 14)
Claim 16 as it depends from Claims 1, 2, 5, 7, 13, 14, or 15 (on the foregoing dependencies)
Claim 17 (on the foregoing dependencies of Claim 16).

[283] This means the Asserted Claims are invalid for anticipation with the exception of Claim 3; Claim 5 as it depends from Claim 3; Claim 6 as it depends directly or via Claim 5 from Claims 2 or 3; Claim 7 as it depends directly or via Claim 5 from Claim 3; and Claims 13 to 17

as they depend on one of these claims and dependencies. I will focus on these remaining claims in discussing Chanel's other challenges to the validity of the Asserted Claims.

[284] Before concluding on the issue of anticipation, I note my agreement with Chanel that if I had accepted the construction proposed by Mr. Hatch and Molo with respect to the *supports*, namely that the two outer *laminar panels* made of the same material as the other *panels* can be viewed as *supports* that provide *rigidity* to the *core*, then additional prior art references would become relevant for purposes of anticipation, notably honeycomb tissue paper itself (such as that produced by Fest-Dekor), and other disclosures by the inventors of prototype honeycomb softwalls more than a year before the filing date, namely other aspects of their Soft Housing submission to the DBEW competition (Exhibits 6, 7), their submission to the LighTouch Lighting System Design Competition (Exhibit 8), and an article about the softwall (then styled "Soft Wall") in Architectural Record magazine (Visser First Report, Appendix 40).

(2) Obviousness

(a) Principles

[285] A patent claim is invalid if the subject matter defined by it would have been obvious on the claim date to a POSITA, having regard to information disclosed before the claim date (if the disclosure is by a third party), or more than a year before the filing date (if the disclosure is by the applicant): *Patent Act*, ss 2("invention"), 28.3; *Lilly Olanzapine* at paras 54–55, citing *Sanofi* at paras 66–69.

[286] Chanel and Molo each referred to the four-part framework for the assessment of obviousness established by the Supreme Court at paragraph 67 of *Sanofi*:

> (1) (a) Identify the notional "person skilled in the art";
>
> (b) Identify the relevant common general knowledge of that person;
>
> (2) Identify the inventive concept of the claim in question or if that cannot readily be done, construe it;
>
> (3) Identify what, if any, differences exist between the matter cited as forming part of the "state of the art" and the inventive concept of the claim or the claim as construed;
>
> (4) Viewed without any knowledge of the alleged invention as claimed, do those differences constitute steps which would have been obvious to the person skilled in the art or do they require any degree of invention?

[287] This approach is neither mandatory nor inflexible: *Sanofi* at para 63; *Biogen* at para 143. The various tests and criteria set out in *Sanofi* and elsewhere are designed as aids to assist the Court in reaching an answer to the fundamental question set out in the *Patent Act*, namely "Would the subject matter of the claim have been obvious to the POSITA on the claim date in light of the prior art?": *Patent Act*, s 28.3; *Biogen* at para 143. In answering this question, it is important to keep in mind that something is only obvious if it calls for no inventiveness at all, not even a "scintilla," and the POSITA would have come directly and without difficulty to the claimed invention: *Hospira* at para 79, citing *Beloit Canada Ltd v Valmet Oy*, [1986] FCJ No 87 (CA) at para 19; *Tearlab* at para 81; *Pharmascience Inc v Teva Canada Innovation*, 2022 FCA 2 [*PMS Glatiramer*] at paras 32, 38, leave to appeal ref'd 2022 CanLII 88690 (SCC). Answering the question is to be done objectively and purposively, having regard to the problem addressed in the patent: *Shire* at para 103.

[288] Various factors may help guide this assessment contextually, with the importance given to particular factors depending on the facts of the case: *Biogen* at para 143. Relevant factors may include the climate in the relevant field, the motivation to solve a recognized problem, and the time effort involved in the invention, as well as secondary factors such as commercial success or meritorious awards: *Novopharm Limited v Janssen-Ortho Inc*, 2007 FCA 217 at para 25; *Bauer Hockey Ltd v Sport Maska Inc (CCM Hockey)*, 2020 FC 624 at paras 144–151 [*Bauer (FC)*], aff'd 2021 FCA 166 [*Bauer (FCA)*].

[289] The "inventive concept" referred to at the second step of the *Sanofi* approach is somewhat different from a simple construction of the claims, although the two are similar: *Shire* at paras 67–69. If the inventive concept is not "readily apparent," and cannot be identified from the claims construction exercise, it can be construed with regard to the disclosure: *Shire* at para 67, citing *Sanofi* at para 77. However, the disclosure cannot be used to construe the inventive concept more narrowly or widely than the text of the claims will allow, and the inventive concept cannot be based on some "generalized concept" from the disclosure: *Shire* at paras 67–69. As a patent is limited to a single invention, a single inventive concept must flow through the patent. However, each claim's "specific inventive concept" may be different: *Shire* at paras 55, 77.

[290] The "state of the art" referred to in the third step of the *Sanofi* approach is the prior art available to the public: *Patent Act*, s 28.3. It includes any publicly available prior art in the field, regardless of how it is located or how obscure it is: *Mylan Tadalafil* at paras 23–25; *Gemak* at para 97. It is not limited to the CGK, which is merely a subset of the prior art, or to art that

would have been found in a reasonably diligent search: *Hospira* at paras 83–86. However, the CGK and the findability of prior art may be relevant to the question of obviousness at the fourth step, such as in assessing whether a POSITA would combine prior art references: *Hospira* at para 86; *PMS Glatiramer* at paras 32–33.

(b) The inventive concept of the ’927 Patent

[291] I have discussed above the identity of the POSITA and their CGK, which would be the same on the relevant date for obviousness as for construction. I therefore turn to the inventive concept, on which the parties and experts had differing views.

[292] Prof. Visser described the inventive concept of Claim 1 as being “the inclusion of a support on the ends of a honeycomb core that was more durable than the material of the honeycomb core”, with the inventive concept of the dependent claims including the additional limitations introduced by those claims: Visser First Report, para 129. Mr. Hatch criticized Prof. Visser’s inclusion of “honeycomb,” because it invoked hexagonal honeycomb structures, and his inclusion of “durability,” which is not referred to in the ’927 Patent: Hatch Second Report, paras 160–165; Transcript, pp 1083–1084. However, Mr. Hatch did not propose his own definition of the inventive concept until his testimony at trial, when he opined that the inventive concept is “a flexible, freestanding partition, one that can be used to subdivide a room very easily,” with aspects relating to the ability to go from a “very compact form” into a freestanding wall, and to the lightweight nature of the partition: Transcript, pp 1084–1085.

[293] In closing submissions, Molo submitted that the inventive concept of the patent is the "stability and self-standing nature of the lightweight partition achieved by folding the supports located at opposite ends of the core along a vertical axis (and maintaining such configuration) to provide enhanced rigidity at each end of the partition": Molo Closing Submissions, para 134. It argued that this inventive concept tracks the language of Claims 2 and 3 in particular, while conceding that it is not captured in Claim 1: Transcript, pp 1382–1385. Chanel did not address the inventive concept directly in closing submissions, focusing on the differences between the prior art and the claims.

[294] In my view, neither expert has encapsulated the inventive concept disclosed and claimed in the '927 Patent. I agree with Mr. Hatch that neither the patent nor its inventive concept pertains to the durability of the *supports*. However, the inventive concept also does not pertain to the weight of the article, which is neither a limitation of the claims nor mentioned in the disclosure beyond describing the disadvantages of heavy prior art *partitions*.

[295] The single inventive concept that flows through the patent must be guided by the claims. It therefore cannot be limited by aspects that only appear in dependent claims, such as the *flexibility* of the *supports*, or the *tubular configuration* they can be folded into. In my view, the single inventive concept running through the patent can be stated as being a piece of *flexible furniture* that is or includes a *partition* that can be collapsed or expanded into a *freestanding wall* because it is made of a *core* of a collapsible and expandable honeycomb-like *lattice structure*, supported on its ends by more rigid *supports*. While this description of the inventive concept is fairly simple, and largely tracks the language of Claim 1, it is in my view consistent with both

the inventors' description of the article they have invented and the manner in which they have claimed their invention, without adding unnecessary glosses such as durability or weight. It also helps underscore that the inventive concept as claimed is not simply the use of honeycomb paper blocks as a partition, but an article of furniture with particular features that incorporate the use of honeycomb lattice (as noted above, I reject Mr. Hatch's attempt to distinguish between the terms honeycomb and lattice).

[296] The ability to fold the *supports* into a *tubular configuration* becomes part of the specific inventive concept of Claims 2 and 3, but is not part of the "single inventive concept" running through the patent as a whole. This is consistent with the inventors' discussion of this aspect of the invention as providing optional "enhanced" rigidity and not requiring it as part of the independent claim of the patent: '927 Patent, para 23. Thus, the specific inventive concept of Claims 2 and 3 is a piece of *flexible furniture* that is or includes a *partition* that can be collapsed or expanded into a *freestanding wall* because it is made of a *core* of a collapsible and expandable honeycomb-like *lattice structure*, supported on its ends by more rigid *supports* that are nonetheless sufficiently *flexible* that they can be folded into a *tubular configuration* for enhanced *rigidity* (Claim 2) and that have *fasteners* on them to maintain that configuration (Claim 3).

[297] The specific inventive concepts of the other dependent claims relate to the particular limitations they include, together with those of the claims they depend from. However, Molo does not contend that what is inventive in the '927 Patent is having the voids oriented on the *longitudinal axis* of the *laminar panels* (Claim 5); making the *lattice structure* of paper (Claim 6)

or *non-woven material* (Claim 7); or the particular size of the *laminar panels* used to make the *core* (Claims 14 to 17).

(c) Differences between the state of the art and the inventive concept(s)

[298] As I have concluded above, there is no difference between the prior art (in the form of Suominen and the inventors' own prior disclosure in the Soft Housing submission) and all of the Asserted Claims except (i) Claim 3; (ii) Claim 5 as it depends from Claim 3; (iii) Claim 6 as it depends directly or via Claim 5 from Claims 2 or 3; (iv) Claim 7 as it depends directly or via Claim 5 from Claim 3; and (v) Claims 13 to 17 as they depend on one of these claims and dependencies. Given these dependency cascades, the key to the relevant inventive concept and the obviousness analysis lies in Claim 3 and in Claim 6 as it depends from Claim 2.

(i) The state of the art

[299] As relevant prior art for the purpose of the obviousness analysis, Chanel relies on the same four references it raises for purposes of anticipation (Suominen, Harada, Soft Housing, and Okuno), as well as available honeycomb furniture products, namely the K-Bench; the Honey-Pop Chair and an associated patent application; and the other prior disclosures of the softwall and honeycomb paper walls by Ms. Forsythe and Mr. MacAllen (which Chanel referred to collectively as the "Honeycomb Wall"): Visser First Report, paras 147–167; Chanel Closing Submissions, paras 185–216.

[300] Molo criticized Prof. Visser's approach to the prior art. It argues it is improper to specifically look for invalidating prior art, citing this Court's decisions in *Tensar Technologies, Limited v Enviro-Pro Geosyntehics Ltd*, 2019 FC 277 at para 155, *Astrazeneca Canada Inc v Apotex Inc*, 2015 FC 322 at para 231, and *Bristol-Myers Squibb Canada Co v Novopharm Ltd*, 2005 FC 1458 at para 87. I agree that, as discussed in these cases, there is a material risk of hindsight analysis if the state of the art is considered to include only those documents similar to the patent in issue, or involves an attempt to mosaic multiple references that have been found by looking for art that contains specific elements of a claim.

[301] Nonetheless, the Federal Court of Appeal has confirmed that the "state of the art" for purposes of the obviousness analysis is not limited either to the CGK or to art that may be found through a reasonably diligent search: *Hospira* at paras 81–86. In this case, neither Prof. Visser's evidence nor Chanel's obviousness arguments seeks to mosaic two or more prior art references by suggesting that, for example, the POSITA considering Suominen in light of Harada would be immediately drawn to the solution in the '927 Patent. Rather, Chanel argues that starting at any individual piece of prior art, it would be obvious to the POSITA in light of their CGK to bridge the differences between that art and the '927 Patent: Visser First Report, paras 155–167; Transcript, pp 1585–1592.

[302] Chanel argues that *Hospira* and other cases stand for the proposition that anything available to the public is citable prior art for purposes of obviousness: Transcript, pp 1587–1588. I am not sure that *Hospira* goes quite so far. In particular, *Hospira* does not appear to disturb the principle, stated in *Mylan Tadalafil* and reiterated in *Gemak* (subsequent to *Hospira*), that the

prior art is the collection of learning "in the field of the patent at issue": *Mylan Tadalafil* at paras 23–25; *Gemak* at para 97. This language suggests that a piece of art may not be citable prior art if it is entirely outside the field of the patent.

[303] At the same time, Justice Locke in *Hospira* relied on the language of section 28.3 of the *Patent Act* to conclude that the prior art is not limited to art that would have been located in a reasonably diligent search: *Hospira* at paras 85–86. That section refers only to "information disclosed […] in such a manner that the information became available to the public," without limiting either the public or the disclosure to the particular field or art of the patent: *Patent Act*, s 28.3. Justice Locke's reliance on this section might therefore be taken as an indication that a publication need not be "in the field of the patent at issue" in order to be citable prior art. Either way, however, this Court has recognized that the CGK, and by extension the citable prior art, may include art in a sufficiently related field, such as the field of footwear when looking at a patent pertaining to skates: *Bauer (FC)* at paras 37–44, aff'd *Bauer (FCA)* at para 8. Depending on its nature, a piece of prior art may also be relevant to, and form part of the state of the art of, multiple fields of endeavour.

[304] I am satisfied that the prior art cited by Chanel is part of the state of the art in the field of the '927 Patent, namely the industrial design of furniture. Each of the cited references pertains to the design of furniture, with the possible exception of Okuno, which pertains to a lampshade, which might not be considered "furniture." While Suominen pertains mostly to curtains, it expressly refers to the use of its disclosed structures as self-supporting walls. In any event, and even if the field of the '927 Patent were limited to "partitions," the experts agreed that the art in

that field would not be limited to art relating exclusively to partitions or furniture: Hatch First Report, paras 33–36. To the contrary, Mr. Hatch asserted that in the field of industrial design, there is "no limitation of the sources for inspiration": Hatch First Report, para 40.

[305] Turning to the prior art itself, I have described the Suominen, Harada, Soft Housing, and Okuno references above in some detail. The remaining cited art can be described more briefly.

[306] K-Bench. Charles Kaisin's K-Bench, sometimes called "Extendable Bench" or "The Expandable Bench," was designed in 2002 and consisted of a block of expandable honeycomb polypropylene sheets that could be unfolded and shaped into various configurations such as a lateral block, or block with its ends pulled flat onto the ground: Visser First Report, para 150; Exhibits 36, 37, 38.

[307] Honey-Pop Chair. The Honey-Pop Chair is made of a stack of 120 sheets of honeycomb parchment paper, cut into the form of an armchair, which can then be unfolded and sat upon, adapting to the shape of the sitter: Exhibit 47. Its form and construction are also described in Japan Patent Application JP 2002–3062669 titled "Freely Expandable Support and Method for Forming Such, Sheet Layered Body for Providing Support," filed by the designer of the Honey-Pop Chair, Tokujin Yoshioka: Exhibit 81.

[308] Honeycomb Wall. Chanel uses this term to refer to Molo's own prior disclosure of the softwall or prototype honeycomb paper walls in several publications. In addition to the Soft Housing submission to the DBEW competition, Chanel cites Molo's submission to the

LighTouch competition and the Architectural Record article about the "Soft Wall" referred to in paragraph [284] above, as well as a Vancouver Sun article from December 2003: Exhibit 8; Visser First Report, Appendix 40.

[309] The LighTouch Competition submission is similar to the Soft Housing submission. In particular, it includes two of the four photographs in the Soft Housing submission of Ms. Forsythe unfolding a tall honeycomb tissue blanket into a wall, plus a third in which Ms. Forsythe is seated comfortably away from two such walls, which stand on their own: Exhibit 8, p 4. Molo argues, based on Ms. Forsythe's evidence, that these taller blocks did not stand for very long or were susceptible to being blown or knocked over: Transcript, pp 128–130, 141–142, 311–314, 320–321; Hatch Second Report, para 119. I have discussed this evidence at paragraphs [261] to [263] above. In my assessment, Ms. Forsythe's evidence does not disturb the conclusion that the photographs show the POSITA precisely what they appear intended to show, namely the use of blankets of honeycomb tissue being opened up into walls that stand on their own. Further, there was no evidence that the shorter blocks of expanded honeycomb paper in the photographs were unable to stand on their own.

[310] The Architectural Record article shows an overhead view of an expanded and curved Soft Wall product that is described as a "flexible partition pre-fabricated from 600 thin layers of a soft, translucent, nonwoven textile": Visser First Report, Appendix 40. The Soft Wall in this picture, described by Ms. Forsythe as "one small photo of the softwall without the end panel," is clearly shown as being *freestanding*: Exhibit 147 (Q 1884). While the far end of the Soft Wall is not visible in the photograph, the near end is clearly not attached to anything and the Soft Wall

as a whole is plainly shown as *freestanding*. Molo and Mr. Hatch contend that the POSITA would understand that because one end of the Soft Wall was not visible, it was therefore attached to a fixed wall at the other end, and that attaching one end of the wall many metres away would somehow affect the Soft Wall's ability to stand on its own: Hatch Second Report, para 198(e); Transcript, pp 851–852. However, this contention is unexplained, inconsistent with the photograph, and does not make sense from a mechanical perspective. It does not accord with a POSITA's understanding of the article and what is disclosed in it.

[311] Chanel also cites a Vancouver Sun article from December 2003 profiling Ms. Forsythe and Mr. MacAllen as "Architecture's rising stars," which includes photographs used in the competition submissions, refers to using honeycomb tissue paper or polypropylene as walls for a temporary room as the "core idea of Soft Housing," and makes the connection to "those fold-out paper bells for wedding decorations, or Chinese New Year streamer banners": Visser First Report, Appendix 41.

[312] While Chanel cites these prior art publications individually, it is convenient to describe some common aspects of them. Each of the cited prior art references involves the use of a honeycomb *lattice structure*. All except Harada discloses the *lattice structure* being formed from multiple *laminar panels* of a *flaccid material* that are *inter-connected* to make the *lattice structure* when pulled apart. I am satisfied that while Harada does not itself disclose that its *lattice structure* is formed in this way, it would be obvious to the POSITA that the *lattice structure* could be formed in this way, and thus obvious to create the sofa or table of Harada using a *lattice structure* formed from multiple *laminar panels* of *flaccid material*.

[313] Suominen, Harada, Soft Housing, and Okuno each show use of a *pair of supports* at either end of the *core* of *laminar panels*. In the case of Suominen, this includes either fully rigid *supports* (slats) or more flexible ones (thicker sheet material). Harada and Soft Housing both involve fully rigid *supports* (the L-shaped plates of Harada and the plywood cabinet and rigid honeycomb panel of Soft Housing). In Okuno, the end *supports* (substrates) are either fully rigid (hard synthetic resin, aluminum, or plywood) or more flexible (cardboard). The K-Bench, Honey-Pop Chair, and other Honeycomb Wall references do not show the use of a *pair of supports* that are more rigid than the *laminar panels* of the honeycomb *core*.

[314] For the reasons discussed above, and despite Molo's contrary arguments, Suominen, Soft Housing and the other Honeycomb Wall references each expressly disclose the use of the honeycomb structures as *partitions* and, in particular, as *freestanding walls* when the *lattice structure* is expanded.

(ii) Differences between the prior art and Claim 3

[315] As noted, the inventive concept of Claim 3 includes a *partition* that has a honeycomb *core* and a *pair of supports* that (a) are more rigid than the *core* but *flexible* enough to be folded into a *tubular configuration*, and (b) have *fasteners* to maintain the *tubular configuration*. The latter aspect of this is important. Although Claim 2 refers to the *tubular configuration*, it only places a limitation on the flexibility of the *supports*, *i.e.*, the *supports* need only be sufficiently flexible to be capable of being folded into the *tubular configuration*. However, Claim 3 requires the *fasteners* to be on the *supports* to maintain the *tubular configuration*, *i.e.*, the *fasteners* must be configured on the *supports* in such a way that the *tubular configuration* is maintained. The

inventive concept of Claim 3 thus includes a configuration of the article specifically directed to creating and maintaining the *tubular configuration* of the *support*.

[316] The references in the prior art discussed above differ from this inventive concept of Claim 3 of the ’927 Patent in different ways. Although Suominen includes *supports* that are sufficiently *flexible* to form a *tubular configuration*, it lacks *fasteners* on the *support* to maintain the *tubular configuration*, and gives no indication to the POSITA to either create or maintain such a configuration. Harada and Soft Housing also lack flexibility in the *supports* themselves, while the K-Bench, Honey-Pop Chair, and Honeycomb Wall references lack *supports* that add *rigidity* to the honeycomb lattice *core*. Okuno refers to *fasteners*, but they are not configured to maintain the *supports* in a *tubular configuration* and there is again no indication to the POSITA to either create or maintain such a configuration, as discussed at paragraph [281] above.

(iii) Differences between the prior art and Claim 6 as it depends from Claim 2

[317] Claim 6 requires the *laminar panels* of the *core* to be made of paper. The inventive concept of Claim 6 as it depends from Claim 2 is thus a piece of *flexible furniture* that is or includes a *partition* that can be collapsed or expanded into a *freestanding wall* because it is made of a *core* of a collapsible and expandable honeycomb-like *lattice structure* made of paper, supported on its ends by more rigid *supports* that are nonetheless sufficiently *flexible* that they can be folded into a *tubular configuration* for enhanced *rigidity*.

[318] The differences between the prior art, and in particular Suominen, and this inventive concept are smaller than in respect of Claim 3. As discussed above, Suominen discloses an article of *flexible furniture* with all of the elements of Claim 2, including *supports* that are sufficiently flexible to bend into a *tubular configuration*, but does not specifically disclose the use of paper as the "thin-film material" used for the flexible strips. This is the sole difference between Suominen and the inventive concept of Claim 6.

[319] Harada and the Soft Housing and Honeycomb Wall references differ from this inventive concept with respect to the *supports* of Claim 2. Each discloses the other elements of Claim 2 and each has a *core* made of paper *laminar panels* as required by Claim 6 (except the Architectural Record article, which refers to a non-woven textile rather than paper). However, Harada and Soft Housing have completely rigid *supports*, while the Honeycomb Wall references do not include *supports* at all.

(iv) Remaining dependencies

[320] The limitations in the other dependent claims are all found in the foregoing prior art. For example, each of the references discloses the voids of the *lattice structure* being oriented vertically on the *longitudinal axis* of the *panels* (Claim 5); Suominen, Soft Housing, Okuno, K-Bench, and the Honeycomb Wall references disclose making the *lattice structure* from *laminar panels* of *non-woven material*, while Harada refers to the *lattice structure* as being made from *non-woven material* (Claim 7); and Suominen, Harada, Soft Housing, K-Bench, and the Honeycomb Wall each meet some or all of the dimensional limitations (Claims 14–17).

(d) Whether the differences would be obvious to the POSITA

[321] I make three preliminary notes regarding the assessment of whether the foregoing differences between the prior art and inventive concept of the claims are obvious to the POSITA.

[322] First, Molo argues that the relevant perspective is that of the POSITA tasked with designing and making a partition, while Chanel describes it as that of the POSITA tasked with designing or developing a flexible partition in particular: Molo Closing Submissions, para 135; Chanel Closing Submissions, paras 188, 206; Transcript, pp 1478–1479 (but see p 1065). Molo's description led it to argue that the POSITA tasked with designing a partition would likely use rigid materials rather than flexible ones.

[323] As noted above, the Federal Court of Appeal has reiterated that obviousness is to be assessed objectively and purposively, "having regard to the problem addressed in the patent": *Shire* at para 103, citing *Apotex Inc v Pfizer Canada Inc*, 2019 FCA 16 at paras 32, 35, 39. The inventors state that the problem they were addressing was the various drawbacks of rigid partitions: '927 Patent, paras 2–6. Following the approach laid out in *Shire*, this suggests that the question is whether the invention of the relevant claims of the '927 Patent would be obvious to the POSITA seeking to address the drawbacks of rigid partitions in particular. The POSITA would not seek to address the drawbacks of rigid partitions by making a rigid partition.

[324] In any event, the state of the art included specific references to the use of honeycomb lattice structures to make walls, including both Suominen and the inventors' own prior

disclosures in the form of the Soft Housing and Honeycomb Wall references. The relevant question is not whether the invention would be obvious to the POSITA starting from scratch, but whether the invention would be obvious to the POSITA in light of the prior art but without knowledge of the invention claimed: *Patent Act*, s 28.3; *Shire* at para 103; *Sanofi* at para 67.

[325] Second, I agree with Chanel that Mr. Hatch's approach to the obviousness analysis appears to place too great a focus on issues that are generally considered to be "secondary factors" in the final stage of the analysis, namely commercial success and industry recognition: Hatch Second Report, paras 150–155; Transcript, pp 1155–1159; *Novopharm* at para 25. Mr. Hatch appears to enter the analysis with the consideration that "the extent of the industry recognition lavished on softwall and, by extension, the 927 Patent is exceptional and indicates that the luminaries of the design industry considered softwall to be extraordinarily innovative": Hatch Second Report, para 154. Placing too much emphasis on a factor that is only secondary in the analysis, and which is "never conclusive, in and of itself," can inappropriately skew the analysis away from the question of whether the actual invention claimed would be obvious to the POSITA (and not the luminaries of the industry): *Tearlab* at para 68; *Bauer (FC)* at para 151.

[326] This is particularly so if consideration is not given to the reasons why commercial success or industry recognition have been achieved: *Coca-Cola Company v Canada (Attorney General)*, 2023 FC 424 at paras 50–51, citing *Bauer (FC)* at paras 149–150; *Pollard Banknote Limited v BABN Technologies Corp*, 2016 FC 883 at para 224. In the present case, it is clear that Molo, Ms. Forsythe, and Mr. MacAllen have achieved commercial success and received numerous recognitions in connection with the softwall and softblock products. Chanel does not

contest this and it certainly speaks to the impact the design of these products have made in the industry. No party suggested that Molo did not merit these successes or that they do not stand to the credit of Molo and its founders. However, there is no evidence that the commercial success arises from the aspects of the ’927 Patent relevant to the obviousness inquiry, namely the differences from the state of the art identified above. For example, it is clear from review of the exhibits that Molo offers an elegant, sturdy, and resilient product made of Tyvek rather than simply tissue paper. However, there is no evidence that the commercial success derives from the ability to fold the *support panels* and fasten them together.

[327] Similarly, some of the recognitions, including the results of the DBEW and LighTouch competitions, came from submissions of material disclosed to the public by the inventors more than a year before the filing date of the ’927 Patent. The later recognitions appear to have focused on elements of the softwall and softblock that are not the subject of the’927 Patent, including aesthetics, construction, and even lighting. Even Ms. Osborne and Ms. Hvid, who gave evidence regarding awards given to Molo, focused on the use of honeycomb material in the products, and did not refer to either *supports* or the folding of those *supports* into a *tubular configuration* as being the basis for the awards: Transcript, pp 412–417, 420–422, 429–432.

[328] Third, I note that the final step of *Sanofi* may involve consideration of whether it would be “obvious to try” the step said to be inventive: *Sanofi* at paras 64–67. However, in the present case Chanel does not argue that the “obvious to try” approach is appropriate or relevant: Visser First Report, para 130.

[329] With these preliminary observations, I turn to the question of whether the differences identified above would have been obvious to the POSITA in light of the prior art.

(i) The differences between the prior art and Claim 3 would not have been obvious

[330] Chanel argues that Claim 3 is obvious in light of Suominen. It relies on the fact that, as discussed above in respect of anticipation of Claim 2, Suominen discloses that the outermost strips of the honeycomb may made of a thicker sheet material, which the POSITA would understand to be a *support* more rigid than the *core* but still sufficiently *flexible* to be foldable into a *tubular configuration*. It then suggests that it would be obvious to fasten this *support* using any type of *fastener* in the CGK.

[331] I disagree. I reiterate that Claim 3 specifically claims *fasteners* on the *support* to maintain the *tubular configuration*. To get from Suominen to Claim 3, the POSITA would first have to identify the value in folding the *support* into a *tubular configuration*, before considering the attachment of *fasteners* to maintain that configuration. In other words, the mere existence of a *support* that is sufficiently *flexible* to fold does not itself point to folding it in a particular way and attaching *fasteners* to hold it in that position. I am not satisfied that the POSITA commencing with Suominen would, to the extent that they encountered a need for additional *rigidity*, consider folding and fastening the *supports* in a *tubular configuration* as the obvious, or an obvious, way to address this concern. If anything, Suominen would guide the POSITA toward the use of internal reinforcement to strengthen the wall, or the use of a *support* made of an even more rigid material.

[332] The same is true of Okuno. In addition to the POSITA having to move conceptually from a small lampshade to something viable as a *partition*, which might in and of itself be obvious, they would have to additionally consider folding the *supports* (cardboard substrates) in on themselves and attaching *fasteners* to maintain that position. Although Okuno discloses *fasteners*, the teaching in Okuno is that these be configured to attach the two *supports* to each other, and not to attach them to themselves.

[333] The distance between Harada and the inventive concept of Claim 3 is even further. While I accept that it would be obvious to the POSITA to make the honeycomb structure of the *core* of the sofa from *laminar panels*, I do not agree with Chanel that it would be obvious to the POSITA to make the *supports* (the L-shaped plates) foldable, still less to attach *fasteners* to configure them in a *tubular configuration*. While Harada describes the L-shaped plates as optional, they are identified as being designed for stability, including through having a portion tucked under the sofa. Even if the POSITA considered making the plates of a more flexible material, their three-dimensional L-shape with horizontal and vertical portions makes it difficult to conceive how they could viably be folded along the vertical axis into the *tubular configuration* described in the '927 Patent at all; it would certainly not be obvious to do so.

[334] The Soft Housing submission discloses the use of fully rigid *supports* on walls with a *core* with a *lattice structure*. It also discloses, in common with each of the Honeycomb Wall references, the use of honeycomb lattice without any *supports* at all. In my view, it would not have been obvious to the POSITA to move from either of these disclosures to the use of a *support* that is *flexible* and to configure it with *fasteners* to maintain a *tubular configuration*.

[335] I have given considerable weight to Chanel's reference to Ms. Forsythe's own evidence regarding the manipulation of the honeycomb paper walls disclosed in the Soft Housing and Honeycomb Wall references. Ms. Forsythe spoke of handling the honeycomb paper with Mr. MacAllen, testifying that when one pulls it apart, the outer sheets start to form a "C" shape, that this gave a hint of what the honeycomb paper could do, and that this "intuitively" led to designing the folded end panel design: Transcript, pp 156, 315–317. As Chanel notes, this manipulation led to vertical creases in the end of the honeycomb paper that are visible in the LighTouch submission (Exhibit 8); Transcript, pp 314–315. Ms. Forsythe also noted that the tissue paper was easy to tear and difficult to clean, which led to adding felt as a way to protect it, which according to Ms. Forsythe was not about stability (as is discussed in the '927 Patent) but about protecting the vulnerable tissue paper: Transcript, pp 157–158.

[336] I agree with Chanel that this evidence of the inventors' actual conduct in developing the asserted invention points toward the obviousness of the invention. The POSITA starting with the disclosure of partitions made of a block of honeycomb paper from either the Soft Housing or any of the Honeycomb Wall disclosures would almost certainly observe the same phenomenon. When opening the paper by holding the sides of the end panels at opposite ends and pulling them apart, the internal resistance of the paper causes the sides of the end panels to fold into a "C" shape that ultimately becomes the *tubular configuration* described in the '927 Patent, in which the two sides touch.

[337] I am almost persuaded in light of this evidence that the inventive concept of Claim 3 would be obvious to the POSITA in light of the prior art in the form of either the Soft Housing or

any of the Honeycomb Wall disclosures. This is particularly so given the POSITA's knowledge of matters such as the physical properties of paper and other flexible materials, and how cuts, folds, and creases can be applied in manufacture of paper products.

[338] However, the inventive concept of Claim 3 includes the use of more rigid *supports* on the ends of the honeycomb lattice *core*, as well as the configuration of *fasteners* to maintain the *tubular configuration*. It is less clear that the POSITA, even if handling honeycomb paper blocks for use as partitions as described in the Soft Housing and Honeycomb Wall references, would be obviously brought to the combination of using rigid but still sufficiently flexible end *supports* so as to make the *tubular configuration* and configuring them with *fasteners* to maintain that configuration. In this regard, I agree with Molo that it is notable that despite the numerous prior art references that involve honeycomb paper with more rigid end pieces that are still flexible—including honeycomb paper decorations with cardboard ends, Suominen, and Okuno—none of them show an end support being folded in on itself to add structure, rigidity, or support. Indeed, the only reference showing a similar folding structure was a snake hand puppet, where the folding was used to give the snake a mouth: Visser First Report, Appendix 27.

[339] On balance, and considering that only a scintilla of inventiveness is required to render an invention non-obvious, I conclude that the particular combination of features reflected in the inventive concept of Claim 3 would not have been obvious to the POSITA in light of the Soft Housing and Honeycomb Wall prior art references.

[340] The other prior art references cited by Chanel, including the K-Bench and Honey-Pop Chair, have in my view the same or greater differences with the inventive concept of Claim 3. For the same reasons given, I am not satisfied that the inventive concept of Claim 3 would have been obvious to the POSITA in light of these other references.

[341] I therefore conclude that Chanel has not met its onus to demonstrate that Claim 3 of the ’927 Patent is obvious.

(ii) The differences between the prior art and Claim 6 as it depends from Claim 2 would have been obvious

[342] I reach the contrary conclusion in respect of Claim 6 as it depends from Claim 2. As I have concluded above, Soft Housing discloses and enables the subject matter of Claim 1, as well as the subject matter of Claims 6 (*laminar panels* formed from paper) and Claim 7 (*laminar panels* formed from a *non-woven material*) and thereby anticipates those claims. Suominen discloses and enables the subject matter of Claims 1 and 2 (including *supports* that are either fully rigid or *flexible*), and the *non-woven material* of Claim 7. However, neither of these references discloses the particular combination claimed in Claim 6 as it depends from Claim 2, namely *supports* that are *flexible* with *laminar panels* formed from paper.

[343] In my view, the POSITA would readily, and without any scintilla of invention or knowledge of the ’927 Patent, be led to the subject matter of Claim 6 as it depends from Claim 2. Notably, while not specifically disclosing paper, Suominen refers to the use of “any thin flexible material” for this purpose: col 1, ll 61–63. The POSITA, familiar with various rigid and flexible

materials, and with honeycomb tissue paper that incorporates the same honeycomb structure as that described in Suominen, would be immediately led to paper as an alternative thin flexible material. This is particularly so as Suominen describes prior art beehive structures using paper: col 1, ll 26–43. While Suominen notes disadvantages of this prior art, these disadvantages are not directed to the material used to make the cells. It would be obvious to the POSITA looking to make a partition and beginning with Suominen to use paper as the thin flexible material.

[344] I therefore conclude that Claim 6 as it depends from Claim 2 is invalid for obviousness.

[345] The obvious use of paper as the thin flexible material of Suominen would result in a product that equally engages all of the remaining limitations of the Asserted Claims (*i.e.,* Claims 13 to 17), for the reasons described above at paragraphs [247] to [249]. My conclusion that Claim 6 is obvious as it depends from Claim 2 therefore renders these remaining dependencies equally obvious, as they depend from Claims 6 and 2.

[346] I note that neither Mr. Hatch nor Molo contended that any of these claims would be non-obvious even if Claims 1 and 2 were found to be obvious or anticipated. Mr. Hatch asserted simply that "the remaining Asserted Claims [*i.e.*, Claims 5–7 and 13–17] are not obvious because all of the remaining Asserted Claims depend from claim 1 and claim 1 of the 927 Patent is not obvious": Hatch Second Report, para 214. Molo similarly raised no arguments to counter Prof. Visser's evidence on this point or Chanel's contention that the remaining Asserted Claims are "minor workshop variations of claims 1–3, either in material or size": Chanel Closing Submissions, para 216; Visser First Report, para 167, pp 115–117.

(e) *Conclusion on obviousness*

[347] For these reasons, I conclude that Claim 3 of the ’927 Patent and the remaining claims as they depend from Claim 3, are not obvious. The other Asserted Claims that I have not already found to be anticipated, namely Claim 6 as it depends from Claim 2 and consequent dependencies, are obvious.

(3) Insufficiency and ambiguity

[348] Chanel contends that Mr. Hatch’s constructions of certain terms in Claim 1 of the ’927 Patent raise concerns about the sufficiency and ambiguity of that claim and thus all dependent claims. In particular, it points to (a) Mr. Hatch’s construction of the term *lattice structure*, distinguishing it from hexagonal honeycomb structures; (b) his incorporation of the concept of a “wall” in the terms *flexible partition* and *freestanding wall*; and (c) his contention that the L-shaped plates of Harada are not *supports* within the meaning of Claim 1 given their structure: Visser Third Report, paras 14–15, 26–30, 38–41. As set out above, I have not accepted Mr. Hatch’s construction of the term *lattice structure* as being distinct from hexagonal honeycomb structures, or his opinions regarding the L-shaped plates of Harada. This leaves the second question related to the concept of a wall.

[349] As referenced at paragraphs [83] to [84] and [278] to [280] above, Prof. Visser and Chanel contend that including in the construction of the term *partition* and/or that of *freestanding wall* the requirement that the *partition* be a “wall” results in a sufficiency and/or ambiguity

problem since the ’927 Patent “does not disclose what is and what is *not* a wall” [emphasis in original]: Visser Third Report, para 26.

[350] A claim may be invalid for insufficiency if the specification fails to teach the POSITA to produce the invention and put into practice its embodiments, using only the instructions contained in the disclosure: *Patent Act*, s 27(3); *Teva Canada Ltd v Pfizer Canada Inc*, 2012 SCC 60 at paras 51–52, 70–71; *Seedlings (FCA)* at para 68.

[351] A patent may be invalid for ambiguity if it does not define “distinctly and in explicit terms the subject-matter of the invention for which an exclusive privilege or property is claimed”: *Patent Act*, s 27(4); *Pharmascience Inc v Bristol-Myers Squibb Canada Co*, 2022 FCA 142 [*Pharmascience Apixaban*] at paras 60–61. However, as the Federal Court of Appeal underscored in *Pharmascience Apixaban*, a claim is not invalid simply because it is not a model of concision and lucidity, and it will likely not be invalid if it can be interpreted using grammatical rules and common sense: *Pharmascience Apixaban* at para 61.

[352] In my view, incorporating the notion of a wall into the term *partition* raises no sufficiency or ambiguity concerns that would render Claim 1 invalid. It is important to recall that one of the central principles of patent construction is that a patent “must be read by a mind willing to understand, not by a mind desirous of misunderstanding”: *Whirlpool* at para 49(c), citing *Lister v Norton Brothers and Co* (1886), 3 RPC 199 (Ch.D.) at p 203. I have no hesitation in concluding that a POSITA reading Claim 1 of the ’927 Patent in the context of the specification as a whole and with a mind willing to understand would be able to understand the

terms *partition* and *wall*, and would be reasonably able to determine whether a given object falls into those categories or not.

[353] The requirements that a patent explain to the POSITA how to put the invention into practice, and define distinctly and explicitly the scope of the claims, cannot mean that a patent is invalid simply for using terms that are well understood and commonly used, but whose limits may be difficult to define with absolute certainty. To suggest that a POSITA would be unable to consider an object and assess whether it meets the requirements of a *partition* or a *wall* because the patent does not spell out "what is and what is *not* a wall" does not accord with the "mind willing to understand" principle.

[354] I note that despite Prof. Visser's subsequently stated concerns about Mr. Hatch's construction of the term *partition*, he did not believe the POSITA would have any difficulty construing the term *freestanding wall* when he first construed Claim 1: Visser First Report, para 109 (pp 42–43). If the POSITA were so unable to understand the term "wall" as to be at a loss to know the scope of Claim 1, then the term *freestanding wall*, which is expressly an element of the claim, would have and should have raised the same concerns.

[355] I appreciate that there may be grey areas around the notion of a *wall* or a *partition*: How low or short can a wall be before it ceases to be a wall? How wide or tall must a partition be before it can begin to "subdivide space"? These questions may be very interesting to a philosopher seeking the Platonic form of the Wall or the Partition. But patent law is directed not to the metaphysical but to new and useful inventions; patents are not directed to the philosopher

of ordinary skill in the art but to a practical, willing, and knowledgeable worker. In my view, an industrial designer with skill and experience in designing furniture including partitions, seeking to understand the ’927 Patent, would be generally able to understand and identify when an article of *flexible furniture* includes a *partition* in the sense of a *freestanding wall* that can subdivide space. As I have explained above at paragraph [279], this assessment will involve consideration of the various dimensions of an object and may involve some judgment. But the fact that there may be some practical flexibility in the application of a word does not of itself render a claim using the word invalid for ambiguity.

[356] In any event, it is worth noting that any concern about the ambiguity of Claim 1 would be not apply to the dependent claims that specifically address the dimensions of the *laminar panels* of the *core* (Claims 14 to 17).

V. Conclusion, Disposition and Costs

[357] For the foregoing reasons, I find that the defendants have not infringed any Asserted Claim of the ’927 Patent. I also find that the Asserted Claims of the ’927 Patent, other than Claim 3 and the Asserted Claims as they depend from Claim 3, are invalid for being anticipated by, or obvious in light of, the prior art. Claim 3 and the Asserted Claims as they depend from Claim 3 are valid. I make no finding with respect to either infringement or validity of the dependent claims that were not asserted (Claims 4 and 8–12).

[358] Given these findings, I need not address the various other issues raised by the parties, including the alleged role of Chanel SAS and Procédés Chénel in inducing infringement or

infringing by common design, issues of territoriality, and the various monetary and other remedies requested by Molo.

[359] Molo's action is therefore dismissed. The counterclaims of Chanel and Procédés Chénel seeking declarations of non-infringement and invalidity are granted in part.

[360] The parties made partial submissions on costs at the conclusion of the hearing, but sought an opportunity to address costs further after disposition of the matter, in light of potentially relevant offers. I encourage the parties to discuss and agree on costs and will give them 20 days in which to do so. If they are unable to do so, they may make written submissions on costs, keeping in mind their partial submissions made at the conclusion of the hearing, in accordance with the following schedule:

- within 40 days of the date of this decision, Chanel and Procédés Chénel may file submissions not to exceed 15 pages, to which they may attach as appendices a bill of costs and any relevant offers to settle;

- within 20 days of receipt of the latter of Chanel and Procédés Chénel's submissions, Molo may file responding submissions not to exceed 25 pages total, to which it may attach as appendices a bill of costs; submissions, not to exceed two pages each, addressing specific line items in the bill(s) of costs of Chanel and/or Procédés Chénel (if filed); and any other relevant offers to settle; and

- within 10 days of receipt of Molo's submissions, Chanel and Procédés Chénel may file reply submissions, not to exceed 3 pages each.

[361] If the parties require additional time to discuss and agree on costs or to make submissions, they may file an informal request to this effect in letter format.

[362] This proceeding is the subject of a confidentiality order issued pursuant to Rule 151 of the *Federal Courts Rules*, SOR/98-106. A confidential version of these reasons is being released to the parties to allow them to identify any confidential information they consider should be redacted before releasing the public version.

JUDGMENT IN T-379-21

THIS COURT'S JUDGMENT is that

1. The plaintiff's action is dismissed.
2. The counterclaim of Chanel Canada ULC and Chanel SAS and the counterclaim of Procédés Chénel International SA are granted in part.
3. Chanel Canada ULC and Chanel SAS and Procédés Chénel International SA are declared not to have infringed any of Claims 1, 2, 3, 5, 6, 7, 13, 14, 15, 16, or 17 of Canadian Patent 2,527,927.
4. Claims 1 and 2 of Canadian Patent 2,527,927 are declared to be and to have always been invalid and void as claiming subject matter that was previously disclosed, contrary to section 28.2 of the *Patent Act*.
5. Claims 5, 6, 7, 13, 14, 15, 16, and 17 of Canadian Patent 2,527,927 as they depend directly or indirectly from Claims 1 and 2, but not as they depend directly or indirectly from Claims 3, 4, 8, 9, 10, 11, or 12, are declared to be and to have always been invalid and void as claiming subject matter that was previously disclosed, contrary to section 28.2 of the *Patent Act*, or that would have been obvious on the claim date to a person skilled in the art or science to which the patent pertains, contrary to section 28.3 of the *Patent Act*.
6. The parties may make submissions on costs in accordance with the schedule given in these reasons.

"Nicholas McHaffie"
Judge

FEDERAL COURT

SOLICITORS OF RECORD

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