

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TARGET CORPORATION
Petitioner

v.

DESTINATION MATERNITY CORPORATION
Patent Owner

Patent No. RE43,531
Filing Date: June 15, 2011
Issue Date: July 24, 2012
Title: BELLY COVERING GARMENT

AND

Patent No. RE43,563
Filing Date: June 15, 2011
Issue Date: August 7, 2012
Title: BELLY COVERING GARMENT

Inter Partes Review Nos. Unassigned

SECOND DECLARATION OF FRANCES HARDER

I, Frances Harder, declare as follows:

1. I have been retained by counsel for Target Corporation to provide opinions on certain issues relating to this petition for *inter partes* review. My declaration provides analysis and expert opinions on the general subject matter disclosed in the RE43,531 patent (“the ’531 Patent”) and the RE43,563 patent (“the ’563 Patent”), the level of ordinary skill in the art, and the patentability of claims 1, 2, 5, 6, 10, 11, 15-19, and 24-29 of the ’531 Patent and claims 1-4, 6-8, 10-14, 16, 20, and 21 of the ’563 Patent.

2. This is my second declaration relating to the ’531 Patent and the ’563 Patent. I executed my first declaration relating to these patents on August 26, 2013, in support of the following petitions for *inter partes* review, which I understand have since been instituted by the Patent Office: *Target Corp. v. Destination Maternity Corp.*, IPR2013-00530 (instituted Feb. 14, 2014) (Exs. 1026, 1027); *Target Corp. v. Destination Maternity Corp.*, IPR2013-00531 (instituted Feb. 14, 2014) (Exs. 1028, 1029); *Target Corp. v. Destination Maternity Corp.*, IPR2013-00532 (instituted Feb. 19, 2014) (Exs. 1030, 1031); and *Target Corp. v. Destination Maternity Corp.*, IPR2013-00533 (instituted Feb. 19, 2014) (Exs. 1032, 1033). Going forward, I sometimes refer to these proceedings collectively as the “Instituted Proceedings.” Also going forward, I sometimes refer to my declaration of August 26, 2013 as my “First Declaration.”

3. I am being compensated at the following rates: \$375 per hour for Consulting, Research and Reports; \$525 per hour for Deposition – Local (local, less than 75 miles); \$4,400 per day for Deposition – Out of Town (out of town, more than 75 miles); \$5,400 per day for Trial Testimony; \$1,500 per day for Travel (not including other services); \$225 per hour for Local Travel (e.g., from my office to client’s office, and return; local, less than 75 miles).

4. I am currently President and Founder of Fashion Business Incorporated, Adjunct Professor and Advisory Board Member at Cal Poly Pomona, Adjunct Professor and Curriculum Advisor – Teaching Professional Practices at Woodbury University in Los Angeles, California, a consultant for the United Nations regarding the development of Alpaca textiles by women owned businesses in Peru, and self-published author of “Fa\$hion for Profit,” which is often used as a textbook. A copy of my curriculum vitae, which describes my qualifications, experience, and lists my publications within the past ten years, is attached as Exhibit 1012.

5. My first job in the fashion industry, in around 1970 for Mothercare UK, involved the design and fabrication of maternity clothes, and I have also been involved in assisting others with maternity clothing business as part of my work as an industry consultant and my educational non-profit Fashion Business Incorporated.

6. I wore commercially available maternity clothing during my pregnancies in 1976 and 1978, and also fabricated my own maternity clothing around those dates, which included pants, dresses, and tops. My daughter was more recently pregnant, from fall 2010 to summer 2011 and fall 2012 to summer 2013, and I observed the maternity garments and fashions available to my daughter at that time.

7. I reviewed and considered a substantial amount of information related to this petition. Exhibit 1013 lists the documents that I considered.

8. I have reviewed the '531 Patent; US Patent No. 7,814,575; '563 Patent; and U.S. Patent No. 7,900,276, and their file histories, and I agree with the description of its claimed subject matter provided in Section III of the respective petitions for *inter partes* review of the '531 Patent and the '563 Patent.

9. I understand that 35 U.S.C. § 102 (“§ 102”) provides the standards for determining whether a claim in a patent is invalid as anticipated by prior art. I understand that a claim in a patent is invalid as anticipated under § 102 if each and every element of the claim is found expressly or inherently in a single prior art reference. I understand that anticipation can be found based on several different grounds, but the only grounds for anticipation that may be presented in a petition for *inter partes* review are those based on patents, and/or printed publications.

10. I understand that, when determining whether the single item of prior art anticipates the claims, one must consider not only what is expressly disclosed in that prior art, but also what is inherently present in that prior art. I understand that claim limitations that are not expressly found in a prior art reference are inherent if the prior art necessarily functions in accordance with, or includes, the claim limitations, or if the missing element or feature would be the natural result of following what the prior art teaches to persons of ordinary skill in the art. I also understand that it is acceptable to examine evidence outside the prior art reference, often referred to as extrinsic evidence, in determining whether a feature, while not expressly discussed in the reference, is necessarily present in the reference. I understand, however, that mere probabilities that an element is present are not enough, but it is not required that persons of ordinary skill actually recognized the inherent disclosure at the time the prior art was first known or used.

11. I understand that 35 U.S.C. § 103 (“§ 103”) provides the standard for determining whether a claim in a patent is invalid as obvious. I understand that a claim in a patent is invalid as obvious under §103 when the differences between the claimed subject matter and the prior art are such that the claimed subject matter as a whole would have been obvious at the time the invention was made to a person of ordinary skill in the art (“POSA”). I understand that, similar to anticipation, the only grounds for obviousness that may be presented in a petition

for *inter partes* review are those based on patents and/or printed publications. I understand that the relevant inquiry for assessing obviousness consists of the following four factors: (a) the scope and content of the prior art; (b) the differences between the prior art and the claims at issue; (c) the level of ordinary skill in the pertinent art at the time of the invention; and (d) objective factors indicating obviousness or non-obviousness—sometimes referred to as secondary considerations or indicia.

12. I understand that a prior art reference may be considered in assessing a patent claim's obviousness if the reference discloses solving any problem or addressing any need addressed by the patent, or if the reference discloses information having obvious uses beyond its primary purpose that a POSA would reasonably examine to solve a problem or address a need addressed by the patent. I understand that a claimed combination of familiar elements according to known methods is likely obvious when it does no more than yield predictable results. I understand that when a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. I understand that if a POSA can implement a predictable variation of claimed subject matter, § 103 likely renders the claim invalid.

13. I understand that an obviousness analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for the

Administrative Law Judge and/or the Patent and Trademark Appeal Board can take account of the inferences and creative steps that a POSA would have employed at the time of the alleged invention. I understand that it is often necessary to look to interrelated teachings of multiple prior art references; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a POSA, all in order to determine whether there was an apparent reason for the POSA to have combined elements in the manner claimed. I understand that any need or problem known in the field of endeavor at the time of the alleged invention or addressed by the patent-at-issue can provide a reason for the POSA to have combined elements in the manner claimed. I understand that one way in which a patent's subject matter can be proved obvious is by noting that there existed at the time of invention a known problem for which there was an obvious solution encompassed by the patent's claims. I understand that a person of ordinary skill attempting to solve a problem will not be led only to those elements of prior art designed to solve the same problem. I understand that common sense teaches that familiar items may have obvious uses beyond their primary purposes, and in many cases a POSA will be able to fit the teachings of multiple prior references together like pieces of a puzzle. I understand that when there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions, a POSA has good reason to pursue the known

options within his or her technical grasp. I further understand that, if this leads to the anticipated success, it is likely the product not of innovation but of ordinary skill and common sense and, as such, likely is obvious.

14. I understand that someone assessing obviousness should be aware of and avoid the potential for distortion caused by hindsight bias and must be cautious of arguments reliant upon *ex post* reasoning. I understand that, before assessing the issue of obviousness, one must also consider certain objective factors—sometimes referred to as secondary considerations or indicia—which, if established, may indicate that the claimed invention may not have been obvious. Such secondary considerations include: (a) Were products covered by the claim commercially successful due to the merits of the claimed invention rather than due to other, unrelated factors, such as, for example, advertising, promotion or marketing, salesmanship, or unclaimed features of the product?; (b) Was there a long-felt but unresolved need for a solution to the problem facing the inventors, which was resolved by the claimed invention?; (c) Did others try, but fail, to solve the problem solved by the claimed invention?; (d) Did others copy the claimed invention?; (e) Did the claimed invention achieve unexpectedly superior results over the closest prior art?; (f) Did others in the field praise the claimed invention or express surprise at the making of the claimed invention?; and (g) Did others accept licenses under the patent-at-issue because of the merits of the claimed invention? I

understand that these factors are only relevant to obviousness if there is a connection, or nexus, between each of them and the claimed subject matter. I understand that, even if one could conclude that some of the above factors have been established, those factors should be considered along with all other available evidence when determining whether the claimed invention would have been obvious to the POSA at the time of the alleged invention.

15. I understand that the priority date of the patents-at-issue is May 31, 2007. In my opinion, a POSA as of May 2007 would have been any of the following: (a) a graduate of a two-year or four-year degree program with an associate's or bachelor's degree in fashion design and at least one to two years of full-time, technical design experience in the commercial garment industry; or (b) an individual with at least four years of full-time, technical design experience in the commercial garment industry. Although I describe the POSA as of May 2007, it is my further opinion that the fundamental qualifications, attributes, and skills of the POSA would have been the same for many years prior to May 2007—at least as of May 2006, for example—and remain the same at present.

16. The commercial garment industry is sometimes referred to as, simply, the “fashion industry.” In the fashion industry, around May 2007, a POSA would and could regularly interchange garment features and components to add or remove functional and aesthetic features desired by consumers. For example, a

POSA could have modified standard denim jeans or other standard pants or bottoms into various styles of maternity jeans, pants, or bottoms. *See, e.g.*, Ex. 1005. A POSA could make modifications to garments to render them suitable for use during pregnancy based on market demand for designs including specific features and/or design needs or market pressures to solve a problem with a finite number of solutions. *See, e.g.*, Ex. 1010. Moreover, a POSA could make modifications to known patterns for maternity jeans, pants, or bottoms to better align them with current trends in fashion, or to add functional or stylistic elements that may be desired. *See, e.g.*, Exs. 1014 and 1015. The POSA had creativity, intelligence at least commensurate with his or her educational background and/or experience, and used judgment and common sense.

17. I understand that the Patent Office, in its decisions to institute the Instituted Proceedings, found that the evidence of supposed secondary considerations submitted by the Patent Owner does not include any evidence of commercial success, such as sales, or proof that any such sales were a direct result of the unique characteristics of the claimed invention invention—as opposed to other economic and commercial factors unrelated to the quality of the patented subject matter. Ex. 1027, at 14-16; Ex. 1029, at 17-19, 21; Ex. 1031, at 15-16, 17-18; Ex. 1033, at 16-17. Further, I understand that the Patent Office found that, with respect to evidence of alleged industry praise, Patent Owner did not link the

praise to the invention of any claims beyond claim 1 of each of the patents-at-issue. Ex. 1027, at 14-16; Ex. 1029, at 17-19, 21; Ex. 1031, at 15-16, 17-18; Ex. 1033, at 16-17. Thus, I understand that the Patent Office found Patent Owner's arguments regarding evidence of secondary considerations to be unpersuasive and insufficient to overcome the Patent Office's obviousness findings. Ex. 1027, at 14-16; Ex. 1029, at 17-19, 21; Ex. 1031, at 15-16, 17-18; Ex. 1033, at 16-17. Accordingly, in view of the Patent Office's findings regarding the supposed evidence of secondary considerations the Patent Owner submitted in the Instituted Proceedings, I do not consider it necessary for purposes of this declaration to consider that evidence, nor, as discussed below, am I aware of any other evidence of secondary considerations bearing on the obviousness of claims in the patents-at-issue.

18. Further, I understand that any possible secondary considerations are not relevant to an anticipation analysis under § 102. Indeed, I understand that the Patent Office, in its decisions to institute the Instituted Proceedings, found that there was no need to consider evidence of alleged secondary considerations in evaluating whether prior art anticipates a claim. Ex. 1027, at 15 n.9; Ex. 1029, at 19 n.8; Ex. 1031, at 16 n.7; Ex. 1033, at 17 n.9.

19. I have considered the available evidence and documentation as they relate to secondary considerations that I discussed previously. In my opinion none of those considerations weighs against my conclusion that certain claims of the

patent subject to this *inter partes* review are obvious as outlined in the invalidity Grounds. Specifically, (a) despite Patent Owner's contention, I am unaware of any evidence or facts showing that the products purportedly covered by the claims are commercially successful due to the merits of the claimed invention; (b) I am unaware of any evidence or facts showing a long-felt but unresolved need that was resolved by the claimed invention as Patent Owner contends; on the contrary, the prior art shows that the claimed invention was already present in the marketplace and the creation of garments embodying the claimed invention was well within the capabilities of a POSA; (c) I am unaware of any evidence or facts showing that other tried and failed to solve the problem claimed by the invention; instead, the prior art shows that the claimed invention was already present within the marketplace, readily within the grasp of a POSA, and was merely a combination of well-known design choices put together to achieve an expected result; (d) I am unaware of any evidence or facts showing that others copied the claimed invention as Patent Owner contends; (e) I am unaware of any evidence or facts showing that the claimed inventions achieved unexpectedly superior results over the closest prior art; the invention, rather, was already present in the prior art, readily within the grasp of a POSA, and was merely a combination of well-known design choices put together to achieve an expected result; (f) I am unaware of any evidence or facts showing praise or surprise in the field at the making of the claimed invention;

and (g) I understand that the Patent Owner has represented that it does not license the patent that is subject to this petition for *inter partes* review.

20. In the Instituted Proceedings, I understand that the Patent Office construed certain terms in claims of the patents-at-issue and provided definitions of those terms. In general, I understand that the Patent Office accorded the claim terms their ordinary and customary meaning to a POSA. Ex. 1027, at 6-8; Ex. 1029, at 6-11; Ex. 1031, at 6-8; Ex. 1033, at 6-9. However, I understand that the Patent Office provided guidance on the meaning of certain terms. For example, the Patent Office stated that “[t]he term ‘breast area’ connotes a broader a meaning than the word ‘breast’ alone.” Ex. 1031, at 7; Ex. 1033, at 7. I also understand that the Patent Office provided specific definitions for certain terms. For example, the Patent Office construed the term “hyperboloid cylinder” in claim 20 of the ’563 Patent and claim 18 of the ’531 Patent to mean “an hourglass-shaped cylinder,” which shape refers to the belly panel’s or garment upper portion’s “residual shape,” not its shape as imparted by a wearer’s body. Ex. 1029, at 10; Ex. 1033, at 8. Similarly, although the Patent Office accorded the ordinary and customary meaning to the term “straight-sided cylinder” in claim 21 of the ’563 Patent and claim 19 of the ’531 Patent, the Patent Office stated that the claimed shape of refers to the belly panel’s or garment upper portion’s “residual shape,” not its shape as imparted by a wearer’s body. Ex. 1029, at 10-11; Ex. 1033, at 8-9.

21. I was involved in the creation of the claim charts included in the respective petitions for *inter partes* review of the '531 Patent and the '563 Patent and the description of unpatentability grounds discussed therein. I have reviewed and agree with those unpatentability grounds and their associated claim charts and descriptions of unpatentability grounds, in all respects. Below, I provide observations in support of the unpatentability grounds and associated claim charts. These observations are from the perspective of a POSA between May 2006 and May 2007.

22. Figures 2(a), 2(b), and 2(c) of Asada (Exs. 1034, 1035) show an upper edge portion of belly panel 2 (element 2 is identified in Figure 1(a) of Asada) that defines a torso encircling circumference about a wearer's torso that is at or above the wearer's upper abdomen region. This torso encircling circumference defines an upper edge of belly panel 2 that encircles a wearer's torso just beneath the wearer's breast area and is configured to hold the garment up and in place about the torso in a position of a location of maximum girth of the abdomen thereby substantially covering the wearer's entire pregnant abdomen during all stages of pregnancy. This is further confirmed in Asada's text in, for example, the description of Figure 2 on page 2 and in paragraphs [0011]-[0015].

23. Asada's Figures 1(a) and 1(b), along with Figures 2(a), 2(b), and 2(c), show that Asada's belly panel 2 includes a lower edge portion spaced apart from

this upper edge portion that defines a torso encircling circumference (*see* paragraph 22, above) about the wearer's lower abdomen region. Further, Asada's belly panel 2 is shown in Figures 1(a) and 1(b) in a residual form (i.e., not on a wearer) having a straight-sided cylindrical shape.

24. As expressly stated in Asada (Ex. 1035, ¶¶ [0012]-[0014]) and as shown in Figs. 2(a) and 2(b) of Asada, Asada's belly panel or garment upper portion 2 is foldable. Further, as shown in Figures 2(a), 2(b), and 2(c), Asada has no top (i.e., the garment of Asada stops at the top of belly panel 2) and is capable of being folded down by the wearer onto the lower garment portion 1.

25. Asada's Figures 1(a), 1(b), and 3, along with Figures 2(a), 2(b), and 2(c), show that Asada includes a lower garment portion 1, which is attached to a lower edge portion of belly panel 2. Asada's lower garment portion 1 is a pair of pants, which are a type of trousers. This is further confirmed in Asada's text in, for example, paragraphs [0009], [0010], and [0012].

26. As shown in Asada's Fig. 1(a), the lower garment portion 1 of Asada includes a first torso-encircling circumference that recedes downward with a parabolic shape that includes a shallow curvature.

27. A POSA would understand that the "stretch knit" material of Asada's belly panel 2 is knitted with elastic, stretchable strands, such as spandex or similar materials, which I discussed in my First Declaration. *See* Ex. 1011, ¶ 29. Indeed,

a POSA would understand that Asada’s “stretch knit” material could be achieved with the use of a material—such as spandex—having elastic, stretchable strands (also commonly known to the POSA as threads or fibers) that contribute and impart “stretch” to the “stretch knit” belly panel. For example, the POSA would have been aware of the various common shape, construction, and material options discussed in Summers (*see, e.g.*, Ex. 1037, cols. 3:64-4:26).

28. Because the lower portion 1 of the garment of Asada consists of pants that “do[] not look any different from ordinary pants” (Ex. 1035, ¶ [0012]); because the JCP maternity bootcut jeans (Ex. 1002, at 3) consist of denim jeans, which are a type of ordinary pants; and because a POSA would have understood that women desire comfortable jeans to wear during pregnancy that closely resemble ordinary clothing, it would have been obvious to the POSA to use the “foldable” panel disclosed in Asada in place of the “all-around elastic belly panel” disclosed in the JCP maternity bootcut jeans to provide “entire abdomen-covering.” *See* Exs. 1035, 1002, at 3. For these same reasons, a POSA would have understood that s/he could use the lower Levis® stretch denim jeans of the JCP maternity bootcut jeans with pockets, a sewn zipperless fly, and partial waistband in place of the “ordinary pants” disclosed in Asada. *See* Exs. 1035, 1002, at 3. Indeed, in view of the JCP maternity bootcut jeans, these would have been readily available, obvious design choices to the POSA, which would have

involved merely a simple substitution of known clothing/fabric components and features according to their functions and uses, which were well-known to the POSA.

29. A POSA would have recognized and understood that the panel and control area disclosed in the JCP fold-over panel jeans (Ex. 1002, at 2) could have been made to have the residual, straight-sided cylindrical shape of Asada's belly panel 2 (Ex. 1035, Figs. 1(a), 1(b)). *See* paragraph 23, above. Both references show and describe maternity garments (pants and denim jeans, respectively) having a flexible, expandable belly panel that covers the wearer's pregnant belly at all different stages of pregnancy and extends over the belly; that is, from just below the belly to just beneath the wearer's breast area. *See also* Ex. 1011, ¶¶ 24-25, 29-30. Especially in view of the detailed instructions provided in Lauren Sara, as well as Summers's disclosure that a flexible belly panel can have, among other contours, a "uniform" contour and can be made of a variety of different materials to accommodate different panel characteristics, including shape, size, and form (Ex. 1037, cols. 3:64-4:26; *see also* paragraph 36, below), such a modification would have involved merely a simple substitution of known clothing/fabric components and features according to their functions and uses, which were well-known to the POSA. Indeed, it would have been well-known to the POSA that making a belly panel having the straight-sided cylindrical shape of Asada's belly

panel 2 would have been a cost-effective, practical design choice that could be made to fit to a variety of different body types and marketed accordingly. *See also* Stangle, Ex. 1003 ¶¶ [0032], [0033], [0038]-[0042] (discussing that a tubular, expandable sleeve of a maternity garment worn over the torso and which can be incorporated into pants “can be manufactured in various shapes and sizes to accommodate different materials, different body portions and different size requirements and conditions of the persons intending to wear [it]. . . . [A]nd the shape of the [tubular sleeve] can be varied from [a] tubular, very roughly rectangular shape”).

30. A POSA would have understood that turning a wearer’s favorite jeans into a maternity garment was desirable in the marketplace, as demonstrated by Lauren Sara (Ex. 1005), and how adding fashion elements, or faux versions of those elements, in ordinary clothing, such as sewn and/or knitted hemlines, pockets, or a zipperless fly front, to maternity garments were desired by wearers. These principles were described in, for example, Lauren Sara (Ex. 1005) and PULSE; An Early Lesson in Prada, by Danielle Pergament (Ex. 1010). Especially in view of the detailed instructions provided in Lauren Sara and the design suggestions in Pergament, such a modification would have involved merely a simple substitution of known clothing/fabric components and features according to their functions and uses, which were well-known to the POSA.

31. A POSA would have understood that the folded over belly panel construction disclosed in Lauren Sara (Ex. 1005) could be constructed at the height disclosed in Asada (Ex. 1035, figs. 1(a), 1(b), 2(c)), because, for example, both Asada and Lauren Sara relate to types of maternity pants, wearers desired comfortable clothing, and tubular knits were not always readily available to those creating their own modified jeans with a home sewing machine. Lauren Sara expressly discloses denim maternity jeans, and step-by-step instructions for making those jeans, that include, among other things, a belly panel with a top edge of the belly panel folded over and sewn or knitted to an inside of the belly panel fabric. A POSA would have further understood that belly panel of Asada could include a top edge of that was folded over and sewn or knitted to an inside of the belly panel fabric as taught by Lauren Sara, at least because these features of maternity garments were well-known to a POSA, desired by potential customers, and standard practice in the commercial garment industry with respect to garments having a tubular structure or tubular features. Especially in view of the detailed instructions provided in Lauren Sara and the design suggestions in Pergament (Ex. 1010), such modifications would have involved merely simple substitutions of known clothing/fabric components and features according to their functions and uses, which were well-known to the POSA.

32. A POSA would have understood that s/he could utilize a heightened double-layer waistband, as shown in Lauren Sara (Ex. 1005), in place of the stretch knit material used in Asada (Ex. 1035), for cost reasons, or to create modified jeans with a home sewing machine, or because stretch knit material was not readily available. Especially in view of the detailed instructions provided in Lauren Sara and the design suggestions in Pergament (Ex. 1010), such a modification would have involved merely a simple substitution of known clothing/fabric components and features according to their functions and uses, which were well-known to the POSA.

33. A POSA would have understood that belly panels could include a top edge of the belly panel folded over and sewn to or knitted back to an inside of the belly panel fabric, because, for example, hemlines were well-known and desired functional or fashionable elements that may be applied to clothing.

34. A POSA would have understood that a folded over and knitted or sewn top edge is a commonly used method to prevent fraying or running, depending on the type of elastic material utilized in the belly panel.

35. A POSA would have understood that the folded over and stitched or knitted hem disclosed in Stangle (Ex. 1003) could be included on the upper edge of the belly panel of Asada (Ex. 1035), because, for example, both Asada and Stangle

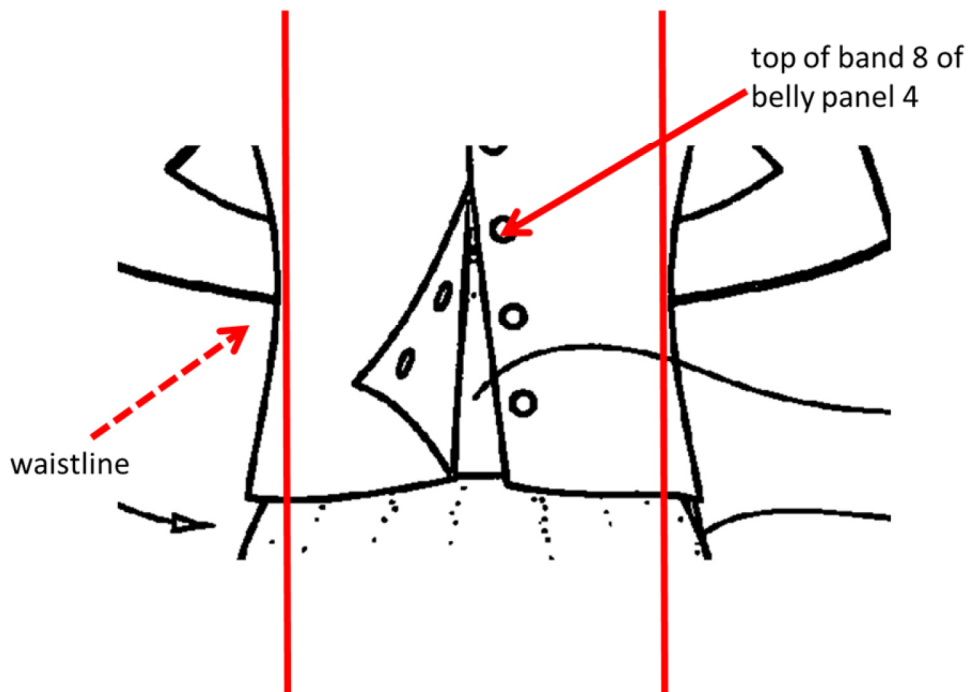
relate to maternity bottoms and wearers desire comfortable maternity clothing with durable edges that stay on their body.

36. Summers discloses that its belly panel can “have a uniform, tapered, or silhouette contour that provides support and shapes the abdominal region of a user.” Ex. 1037, col. 3:64-67. A POSA would have understood that this disclosure describes three different possible residual contours for the belly panel of Summers. A POSA would have understood these contours to pertain and refer to the residual shape of the belly panel because, for example, the residual shapes “provide[] support and shape[] the abdominal region of the user.” *See id.* This is the opposite of the wearer’s body providing the shape of the belly panel. In the context of women’s clothing covering the torso or the belly, a POSA would have understood that a “silhouette” contour—in contrast to a “uniform” or “tapered” contour—refers to the silhouette of a woman’s torso. A POSA would have understood that the typical silhouette of a women’s torso viewed from the front or back is hourglass-shaped. Indeed, this understanding extends beyond the POSA and was (and remains) part of the common parlance as expressed in, for example, dictionary definitions of “hourglass” available prior to the priority date of the patents-at-issue, which reference a woman’s “hourglass figure.” *See* Exs. 1038, 1039. A POSA would have understood that even throughout the different stages of pregnancy, some women maintain the typical, hourglass-shaped silhouette.

Further, in contrast to a “tapered” or “silhouette” contour, a POSA would have understood that a “uniform” contour in the context of women’s clothing covering the torso or the belly refers to a shape whose sides are of a uniform width and, as such, straight and generally parallel (i.e., a straight-sided cylinder).

37. As shown below, in an annotated version of Figure 7 of Summers, a woman is wearing a button-up shirt. The button-up shirt is fitted/shaped to match the hourglass-shaped silhouette of the women. The hourglass-shaped silhouette of the women is shown below in contrast to the added red vertical, parallel lines.

38. The dashed red arrow line, below, indicates the approximate narrowest area of the woman’s hourglass-shaped silhouette, which corresponds to the women’s waistline. The solid red arrow line, below, indicates the top of band 8 of belly panel 4.



39. Apart from the button-up shirt that is fitted/shaped to match the hourglass-shaped silhouette of the women in Figure 7 of Summers, *see* paragraphs 37-38, above, the other figures in Summers—Figures 1-6, 8, and 9—do not show what a POSA would understand to be a belly panel having a residual hourglass shape.

40. A belly panel having a tubular structure would have been well-known to a POSA, and the POSA would have understood that such a structure would have been desired by potential customers of the relevant body type and shape. For example, a POSA would have understood that, just like a tube sock designed to be worn on a foot—a foot being essentially an irregular cylinder of potentially changing dimensions (e.g., due to swelling, bone structure, natural growth, etc.)—a belly panel could similarly have a tubular structure designed to be worn on a woman’s belly and abdomen region during pregnancy, when the shape and size of that region—also essentially an irregular cylinder—can be especially irregular and subject to various changes in dimension. Such a basic tubular structure is disclosed in numerous prior art references, such as, for example, Asada (Ex. 1035, figs 1, 2); Stangle (Ex. 1003, figs. 1, 2, 6, 8, 9); Carney (Ex. 1022, figs. 1, 4, 7); Summers (Ex. 1037, figs. 1-9); JCP (Ex. 1002, at 2, images 1, 2, and 3); Stern (Ex. 1017, figs. 1-3); and Lauren Sara (Ex. 1005, at 4-5). Moreover, just like the tubular structure of a sock can be shaped to approximate the “L”-shaped structure

of the foot and ankle, as taught in Summers (Ex. 1037, col. 3:64-67), the POSA would have understood that the tubular structure of a belly panel could be shaped to approximate and accommodate the typical, hourglass-shape of the female torso. *See also* Stangle, Ex. 1003 ¶¶ [0032], [0033], [0038]-[0042].

41. Further, a belly panel having a residual “silhouette contour,” as expressly taught by Summers (*see* Ex. 1037, col. 3:64-67), would have been well-known to a POSA, and the POSA would have understood that a flexible belly panel having such a contour would have been desired by potential customers of the relevant body type and shape, such as, for example, a corresponding, hourglass-shaped torso. *See also* Stangle, Ex. 1003 ¶¶ [0032], [0033], [0038]-[0042]. The POSA also would have understood that a belly panel having a residual “silhouette contour” and the other characteristics taught by Summers would fit various other body types, including, for example, those having a tapered torso. Indeed, as Summers expressly contemplates and discloses with respect to its belly panel (girdle portion 4), at column 4, lines 3-26, a belly panel could have different constructions (e.g., either one piece of material or a front and a back section being joined at the two sides) and can be made of a variety of different materials to accommodate different panel characteristics, including shape, size, and form:

Girdle portion 4 may comprise any material typically utilized in connection with elastic girdles, such as nylon, cotton, or a combination of other types of fabrics. The type of material may be

chosen from a number of fabrics or fabric combinations in order to achieve a desired elasticity, as one skilled in the art would appreciate. Girdle portion 4 is made of any elastic material that tends to shape, support, or control the user's body. The material utilized in connection with the girdle portion 4 may provide varying levels of support and/or shaping. For example, materials may be chosen having characteristics of greater or lesser elasticity or by using multiple layers (most common being double and triple paneling) of a material with a high level of elasticity. The most common composition of the girdling material is interwoven nylon or lycra spandex.

42. Because, for example, Asada (Ex. 1035) and Summers (*see* Ex. 1037, cols. 6:64-7:17) are both used in the maternity setting as expressly stated therein, a POSA would have recognized and understood that the silhouette contour disclosed for use with a belly panel of Summers (*see* Ex. 1037, col. 3:64-67) readily could be used with the belly panel 2 of the maternity garment disclosed in Asada in order to better fit an individual with a corresponding, hourglass-shaped torso. *See also* Summers, Ex. 1037, cols. 3:64-4:26; Stangle, Ex. 1003 ¶¶ [0032], [0033], [0038]-[0042]. Indeed, such a substitution would have been an obvious design choice for the POSA in view of the POSA's knowledge of the typical female form and torso shape discussed in paragraphs 36-38, above. Such a modification would have involved merely a simple substitution of known clothing/fabric components and features according to their functions and uses, which were well-known to the

POSA. The POSA also would have understood that a belly panel having a “silhouette contour” and the other characteristics, including elasticized fabric, taught by Summers would fit various other body types, including, for example, those having a tapered torso. *See* paragraph 41, above.

43. Further, because, for example, the JCP fold-over panel jeans (Ex. 1002, at 2) and Summers (*see* Ex. 1037, cols. 6:64-7:17) are both used in the maternity setting as expressly stated therein, a POSA would have recognized and understood that the silhouette contour disclosed for use with a belly panel of Summers (*see* Ex. 1037, col. 3:64-67) readily could be used with the belly panel of the JCP fold-over panel jeans in order to better fit an individual with a corresponding, hourglass-shaped torso. *See also* Ex. 1011, ¶¶ 24-25, 29-30; Stangle, Ex. 1003 ¶¶ [0032], [0033], [0038]-[0042]. Indeed, such a substitution would have been an obvious design choice for the POSA in view of the POSA’s knowledge of the typical female form and torso shape discussed in paragraphs 36-38, above. Such a modification would have involved merely a simple substitution of known clothing/fabric components and features according to their functions and uses, which were well-known to the POSA. The POSA also would have understood that a belly panel having a “silhouette contour” and the other characteristics, including elasticized fabric, taught by Summers would fit various

other body types, including, for example, those having a tapered torso. *See* paragraph 41, above.

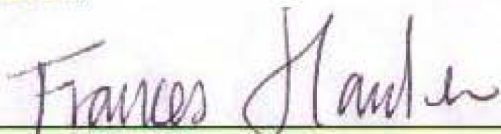
44. As shown in Stern's Figure 2, Stern discloses a belly panel 11 in a residual shape that defines a tubular structure that is shaped and formed as a hyperboloid cylinder, or hourglass-shaped cylinder, to fit a body type having a corresponding, hourglass-shaped torso. *See also* Summers, Ex. 1037, cols. 3:64-4:26; Stangle, Ex. 1003 ¶¶ [0032], [0033], [0038]-[0042]. The POSA also would have understood that a belly panel having the hourglass-shape of the belly panel 11 of Stern and the other characteristics, including elasticized fabric, taught by Stern (Ex. 1017, cols. 3:30-59, 4:28-68) would fit various other body types, including, for example, those having a tapered torso.

45. Because, for example, Asada (Ex. 1035) and Stern (Ex. 1017) are both used in the maternity setting as expressly stated therein, a POSA would have recognized and understood that the hourglass-shape of the belly panel 11 of Stern readily could be used with the belly panel 2 of the maternity garment disclosed in Asada in order to better fit an individual with a corresponding, hourglass-shaped torso. *See also* Summers, Ex. 1037, cols. 3:64-4:26; Stangle, Ex. 1003 ¶¶ [0032], [0033], [0038]-[0042]. Indeed, such a substitution would have been an obvious design choice for the POSA in view of the POSA's knowledge of the typical female form and torso shape discussed in paragraphs 36-38, above. Such a

modification would have involved merely a simple substitution of known clothing/fabric components and features according to their functions and uses, which were well-known to the POSA. The POSA also would have understood that a belly panel having the hourglass-shape of the belly panel 11 of Stern and the other characteristics, including elasticized fabric, taught by Stern (Ex. 1017, cols. 3:30-59, 4:28-68) would fit various other body types, including, for example, those having a tapered torso.

46. It is my opinion claims 1, 2, 5, 6, 10, 11, 15-19, and 24-29 of the '531 Patent and claims 1-4, 6-8, 10-14, 16, 20, and 21 of the '563 Patent are unpatentable as anticipated and/or obvious, as demonstrated by invalidity grounds in the respective petitions for *inter partes* review of the '531 Patent and the '563 Patent.

Executed this 14th day of March 2014.



Frances Harder