United States District Court,
S.D. New York.

V-FORMATION, INC,
Plaintiff.
v.
BENETTON GROUP SPA et al,
Defendants.

No. 01 Civ. 610(HB)

Nov. 20, 2002.

Patentee brought infringement action against competitors over patents directed toward frame construction of in-line roller skates. On competitor's motion for summary judgment of non-infringement and invalidity, the District Court, Baer, J., held that: (1) phrase "devoid of transverse projections" limited sidewalls to embodiments whose major surfaces were flat; (2) phrase "releasably attached" meant that fasteners were required to permit sidewalls to be easily removed and replaced; (3) terms "toe plate" and "heel plate" meant that structural elements were separate elements from skate boot and had actual and identifiable upper surface that was affixed to sole surface of skate boot; (4) particular claims were invalid on basis that they were obvious in view of prior art; and (5) fact issue existed as to whether claims relating to sidewall fasteners literally infringed on patent.

Motion granted in part and denied in part.

Prosecution history estoppel barred patentee from asserting that integrally molded skate boots were equivalent to toe and heel plates "having an upper surface affixed to said sole surface" of patented skate boot, consequently, accused skates did not infringe under doctrine of equivalents; patentee's decision to surrender claims to integrally molded skate boots, while retaining language of toe and heel plate clauses in claims of patent prosecution, was presumed to be general disclaimer of surrendered subject matter.

OPINION & ORDER

BAER**, J.**

I. INTRODUCTION

Plaintiff V-Formation, Inc. ("V-Formation") brought an action against its competitors, defendants Benetton Group SpA ("Benetton") and Salomon North America Inc. and Salomon S.A. ("Salomon"), charging they infringe its patents. The three patents-in-suit are United States Patent Nos. 5,803,466 ("the '466 patent"), 5,873,584 ("the '584 patent"), and 6,045,143 ("the '143 patent") (collectively "the Wrike patents"). All three patents concern the frame construction of in-line roller skates.

The parties contest various terms of the patent claims, including the scope of the terms "devoid of transverse projections" and "releasably attached," and whether "toe plate" and "heel plate" are elements that are structurally distinct from the skate boot. On the basis of their proposed claim construction, the defendants move for summary judgment of non-infringement of the Wrike patents and invalidity of the '584 patent. On September 9, 2002, I held a joint Markman Hearing and oral argument on the defendants' motions for summary judgment. In light of my claim construction, Salomon's and Benetton's motions for summary judgment of non-infringement is GRANTED-IN-PART and DENIED-IN-PART, and their motions for summary judgment of invalidity is GRANTED with respect to certain claims in the '584 patent.

I. FACTS

In-line roller skates are the modern analogue to traditional roller skates. Unlike roller skates, in-line skates have a single row of wheels typically mounted on a frame attached to the sole of a boot. The frame comprises two sidewalls, which extend down to form a space or cavity where the wheels fit. '466, 1:13-16. The sidewalls may be either a part of a one-piece frame construction or a multi-piece frame. '466, 1:44-45, 57. If engaged in aggressive sporting activities, the in-line skate may sustain an impact that damages the sidewalls. If the sidewall is part of a one-piece frame construction, the entire frame must be replaced. '466, 1:44-47. Although multi-piece frames permit replacement of the damaged sidewall without replacing the entire frame, prior art frames used sidewalls that include cross-members or other lateral projections that required having the left and right spare sidewalls separately made and available. '466, 2:4-7. Although the lateral projections increase rigidity, which can improve skate responsiveness, the projections also necessitate "either machining or separately casting each sidewall in the manufacturing process," thus increasing the cost to manufacture the sidewalls. '466, 1:65-2:4. V-Formation's inventions claimed by the '466, '584, and '143 patents purportedly address these shortcomings of the prior art by providing a skate frame that is modularly repairable (as part of a multi-piece frame), with sidewalls that can be replaced easily and inexpensively while maintaining the structural integrity of the skate. '466, 2:42-44.

II. LEGAL STANDARD FOR SUMMARY JUDGMENT

Pursuant to Rule 56(c), I must review the evidence in support of Benetton's and Salomon's motions for summary judgment in a light most favorable to the non-movant. Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 255, 106 S.Ct. 2505, 91 L.Ed.2d 202 (1986). The standard for summary judgment is no different than in any other case. Brown v. 3M, 265 F.3d 1349, 1350 (Fed.Cir.2001) (general summary judgment standard applies to invalidity); TechSearch, L.L.C. v. Intel Corp., 286 F.3d 1360, 1369 (Fed.Cir.2002) (same summary judgment standard applied to non-infringement). If, when "[v]iewing the evidence produced in the light most favorable to the nonmovant ... a rational trier could not find for the nonmovant, then there is no genuine issue of material fact and entry of summary judgment is appropriate." Binder v. Long Island Lighting Co., 933 F.2d 187, 191 (2d Cir.1991). While the burden to demonstrate that no genuine issue of material fact rests solely with the moving party, FDIC v. Giammetti, 34 F.3d 51, 54 (2d Cir.1994), once the moving party has provided sufficient evidence to support a motion for summary judgment, the opposing party must "set forth specific facts showing that there is a genuine issue for trial" and cannot rest on "mere allegations or denials." Rule 56(e); *see* Rexnord Holdings, Inc. v. Biderman, 21 F.3d 522, 525-26 (2d Cir.1994). The "mere existence of a scintilla of evidence in support of the plaintiff's position" is insufficient to defeat a motion for summary judgment. Anderson, 477 U.S. at 252. An "opponent must do more than simply show that there is some metaphysical doubt as to the material facts." Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 475 U.S. 574, 586, 106 S.Ct. 1348, 89 L.Ed.2d 538 (1986).

III. CLAIM CONSTRUCTION

Benetton and Salomon contend in their motions for summary judgment that they do not infringe any of the Wrike patents. The first step of a literal infringement analysis is to construe the meaning and scope of the patent claims asserted to be infringed. Markman v. Westview Instruments, Inc., 52 F.3d 967, 976 (Fed.Cir.1995) (*en banc*), *aff'd,* 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996). The second step is to compare the properly construed claims to the products accused of infringing. *Id*. The first step, claim construction, is a matter of law. Markman, 52 F.3d at 979.

Claim construction begins with the language of the claim itself, which is to be read and understood as it would be by a person of ordinary skill in the art. Dow Chem. Co. v. Sumitomo Chem. Co., 257 F.3d 1364, 1372 (Fed.Cir.2001); Hockerson-Halberstadt, Inc. v. Avia Group Internat'l, Inc., 222 F.3d 951, 955 (Fed.Cir.2000); *see also* Markman, 52 F.3d at 986 ("[T]he focus [in construing disputed terms in claim language] is on the objective test of what one of ordinary skill in the art at the time of the invention would have understood the term[s] to mean."). In construing the claims, the Court may examine both intrinsic evidence (*e.g.,* the patent, its claims, the specification and file history) and extrinsic evidence (*e.g.,* expert reports and testimony, and anything else). Pitney Bowes, Inc. v. Hewlett-Packard Co., 182 F.3d 1298, 1309 (Fed.Cir.1999). In interpreting the disputed term, it is well settled that a court should look first to the intrinsic evidence. Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed.Cir.1996). Generally, the terms in a claim should be given their ordinary and accustomed meaning. K-2 Corp. v. Salomon S.A., 191 F.3d 1356, 1362 (Fed.Cir.1999). Extrinsic evidence is considered only where the intrinsic evidence does not provide a sufficient description of the scope of the claim. *See* Vitronics, 90 F.3d at 1583; Johnson Worldwide Assoc., Inc. v. Zebco Corp., 175 F.3d 985, 989 (Fed.Cir.1999). The definition of a claim term may be altered from its ordinary and accustomed meaning, however, if "clearly and deliberately" set forth in the intrinsic evidence, such as the written description and prosecution history. K-2 Corp., 191 F.3d at 1363. For instance, arguments made during the prosecution of a patent application to distinguish the claimed invention over the prior art may limit the scope of interpretation of the claim term, and should be given the same weight as claim amendments. Elkay Mfg. Co. v. Ebco Mfg. Co., 192 F.3d 973, 979 (Fed.Cir.1999); Southwall Techns., Inc. v. Cardinal IG Co., 54 F.3d 1570, 1576 (Fed.Cir.1995).

A slightly different test for literal infringement is used when a claim element is drafted in "means-plus-function" format. This format is defined by 35 U.S.C. s. 112, para. 6 (1984), which reads:

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

In order to demonstrate literal infringement of a means element in a claim that is subject to s. 112, para. 6, it is necessary to first identify the structure described by the patent specification that correlates to the claimed means. Smiths Indus. Med. Sys., Inc. v. Vital Signs, Inc., 183 F.3d 1347 (Fed.Cir.1999); *Mas-Hamilton Group,* 156 F.3d at 1211. Second, a comparison is made between the accused product and the structure described in the specification. *Mas-Hamilton Group,* 156 F.3d at 1212. As stated in Valmont Indus., Inc. v. Reinke Mfg. Co., 983 F.2d 1039, 1042 (Fed.Cir.1993):

In sum, for a means-plus-function limitation to read on an accused device, the accused device must employ means identical to or the equivalent of the structures, material, or acts described in the patent specification.

The accused device must also perform the identical function as specified in the claims.

A. "Devoid of Transverse Projections"

[1] The '584 patent contains two independent claims. Independent claims 1 and 7 recite an in-line roller skate comprising, *inter alia,* two sidewalls that are (1) devoid of lateral projections, (2) formed of a different material than the heel and toe plates, (3) releasably detachable from the heel and toe plates, and (4) configured to directly attach to axles that carry skate wheels. The sidewalls extend down to create a cavity to receive the wheel axles. Representative claim 1 is set forth below:

1. An in-line roller skate comprising:

a boot having a sole surface with toe and heel portions;

a frame comprising:

a toe plate having an upper, a lower, and a pair of lateral faces, said upper face being affixed to said sole surface toe portion;

a heel plate having an upper, a lower, and a pair of lateral faces, said upper face being affixed to said sole surface heel portion;

spaced-apart first and second downwardly extending sidewalls formed of a material different than said toe and heel plates, *said sidewalls having inner and outer surfaces devoid of transverse projections;* and

fastening means for releasably attaching said first and second sidewalls to respective ones of said toe and heel plate lateral faces;

a plurality of axles mounted to and between said first and second sidewalls; and

a plurality of wheels, each of which is rotatably mounted between said spaced-apart sidewalls on a respective axle. (emphasis added).

The '584 patent does not explicitly define the meaning of the term "devoid of transverse projections."

In its motion for summary judgment, Benetton argues that the term "devoid of transverse projections" should be construed to require sidewalls whose "major surfaces are completely flat." In support of its claim construction, Benetton observes that the '584 patent states that the "inward and outward directions comprise the 'transverse dimension'," 3:47-49, and that the term "projection," is defined by Webster's Third New International Dictionary to mean "a part that projects or juts outs." From these two observations, Benetton concludes that the plain meaning of the term "devoid of transverse projections" requires sidewalls that are flat and lack any portion that projects out from its surface.

Benetton asserts that the '584 patent specification lends additional support for its claims construction of the term. Specifically, Benetton notes that the '584 patent specification states that the sidewalls are "devoid of lateral projections," which "greatly simplifies their manufacture [because] the sidewalls can be formed by simply cutting the appropriate shape from sheet metal or other material rather than requiring additional

machining steps." 5:30-36. Moreover, according to Benetton, the '584 specification explains that flat sidewalls simplify replacement "because the sidewalls ... are substantially structurally identical (which results from the absence of lateral projections thereon), skaters no longer need to carry with them both left and right side replacement sidewalls." 5:67-6:3. Benetton also claims that the prosecution history buttresses its proffered claim construction. Namely, Benetton notes that to distinguish the claimed configurations over the prior art, Wrike, the inventor, stated that difficult to form materials, such as titanium, have had very limited use in skate frames because they are "extremely difficult to machine and thereby form into nonplanar shapes." Polk Decl., Exh. 31 at 6.

V-Formation contends the claimed sidewalls must only be "essentially flat" and that strengthening/decorative undulations or ridges do not affect the essentially planar nature of the sidewalls within the meaning of the '584 patent. V-Formation asserts that Benetton's reliance upon the dictionary is improper and unnecessary, and argues that the '584 patent specification confirms the meaning of the term proffered by V-Formation. V-Formation alleges that the '584 patent specification discusses prior art "that disclose non-planar sidewalls with large projections in the transverse (lateral) direction." and that the inward/outward projections from prior art sidewalls destroy the generally planar configuration of the sidewalls. In response to Benetton's argument that the '584 patent's description of substantially structurally identical sidewalls provides further support for the view that the claimed sidewalls must be flat on both major surfaces, V-Formation points to the dependent claims of the '584 patent, which recite that the left and right sidewalls are "substantially structurally identical." Thus, according to V-Formation, under the doctrine of claim differentiation, claims 1 and 7 may not be construed so narrowly as to essentially make the dependent claims read like the independent claims.

Claim construction should begin with the ordinary meaning of the disputed term, which may be gleaned from dictionaries of the English language. CCS Fitness, Inc. v. Brunswick Corp., 288 F.3d 1359, 1366 (Fed.Cir.2002). Because none of the parties argue that the disputed term has an established specialized meaning in technical dictionaries, encyclopedias, or treatises of the relevant field of art, I find that a standard English dictionary is a proper starting point to understand the ordinary meaning of the disputed term. *See, e.g.,* Inverness Medical Switzerland GmbH v. Princeton, 309 F.3d 1365, 2002 WL 31429033, at (Fed.Cir. Oct.31, 2002). Given the fact that the term "projection," is defined by Webster's Third New International Dictionary to mean "a part that projects or juts outs" and that the claimed sidewalls are "devoid" of transverse "part[s] that project or jut out," I find that, under the ordinary meaning of the disputed term, sidewalls having the disputed claim limitation is properly construed as: sidewalls that are flat.

I find the specification and prosecution history consistent with the construction of the disputed claim term. The patent examiner, during the prosecution of the application leading to the '584 patent, rejected some of the claims in the patent application for obviousness in view of French Patent No. 7,566,762 ("the Baladi patent"). In response to the rejection, Wrike wrote that "[o]nly when the present inventor conceived the recited configuration, in which the side walls are devoid of lateral projections, could titanium and other difficult to form materials be effectively employed in skate frames." Declaration of Louis F. Polk ("Polk Decl."), Exh. 31, p. 6. According to Wrike, titanium had very limited utility in skate frames because they could not be readily formed into nonplanar shapes. *Id*. The '584 patent specification provides examples of such nonplanar shaped sidewalls in the prior art by reference to United States Patent Nos. 4,418,929 ("the '929 patent"), 4,666,169 ("the '169 patent"), and 5,277,437 ("the '437 patent". 1:57-61). Figure 2 in each of the respective patents shows embodiments of sidewalls having lateral projections. Evidently, Wrike overcame the difficulty of using titanium in skates by avoiding the need to machine the material into such nonplanar shapes (*i.e.,* sidewall shapes having "lateral projections"). Indeed, the '584 patent specification

explains that because the sidewalls are "devoid of lateral projections," they may be manufactured by simply cutting the appropriate shape from sheet metal or other material, thereby avoiding additional machining steps. 5:30-36. Thus, "as a result, lightweight, high durability materials ... can be employed, and machining that alters the thickness of the sheet material is not required in the forming process." Id., 5:36-40. In view of the ordinary meaning of the disputed term, Wrike's argument highlighting an innovation of the claimed invention over the prior art and statements by the specification that the claimed sidewalls, as a consequence of being "devoid of lateral projections," avoid the need for additional machining steps that either change the planarity or thickness of the sidewalls, I am persuaded that the term "devoid of lateral projections" limits the sidewalls to embodiments whose major surfaces are flat. Scimed Life Systems, Inc. v. Advanced Cardiovascular Systems, 242 F.3d 1337, 1341 (Fed.Cir.2001); Elkay, 192 F.3d at 979; Vitronics, 90 F.3d at 1582.

B. "Releasably Attached" and "Releasably Attaching"

[2] Independent claims 1, 9, and 17 of the '466 patent and independent claims 1 and 7 of the '584 patent each recite either fasteners or fastening means that "releasably attach" the sidewalls to the mating portions of the toe and heel plates or sidewalls that are releasably attached. Representative claim 1 of the '466 patent reads as follows:

1. An in-line roller skate, comprising:

a boot having a sole surface with toe and heel portions;

a frame, comprising;

a toe plate having an upper face and a lower face, said upper face being affixed to said sole surface toe portion, and two pair of spaced apart flanges extending downwardly from said toe plate lower face, each of said flange pairs defining a cavity therebetween;

a heel plate having an upper face and a lower face, said upper face being affixed to said sole surface heel portion, and two pair of spaced apart flanges extending downwardly from said heel plate lower face, each of said flange pairs defining a cavity therebetween;

first and second downwardly extending sidewalls having front and rear upper portions, wherein said first sidewall is configured such that said rear upper portion is received into a corresponding one of said heel plate cavities and said front upper portion is received into a corresponding one of said toe plate cavities, and wherein said second sidewall is received into the other opposing said toe and heel plate cavities;

a plurality of fasteners for *releasably attaching* said first and second sidewalls to respective ones of said toe and heel plate flange pairs; and

a plurality of wheels rotatably mounted between said first and second sidewalls.

Neither the '466 patent nor the '584 patent define explicitly the scope of the term "releasably attaching" or its variant, "releasably attached."

Benetton asserts that the terms should be construed to mean that the sidewalls can be separated from the

flanges without destroying any part of the skate, including the means of attachment. Salomon suggests that the disputed limitations should be construed to mean that the fasteners can be conveniently removed and reused without special tools or skills to permit easy removal of a sidewall. V-Formation essentially argues that any attachment method that allows the sidewalls to be released should be construed to the terms, releasably attaching and releasably attached.

In support of its claim construction, Benetton cites to Webster's Third New International Dictionary (1993), which defines "releasable" to mean "capable of being released." While Benetton concedes that any fastened together structure is in a sense "releasable," it argues that the ordinary connotation of that term is narrower, referring to attachment mechanisms that permit easy and repeated detachment of the fastened structures. Benetton further argues that its construction of the term is consistent with the way the term is used in the Wrike patents. In particular, Benetton observes that the Wrike patents describe the use of bolts as an example of releasable fastening means, but then discusses the use of rivets or high-strength adhesives to secure the wheel frame to the sole surface of the boot. Benetton suggests that this alone indicates that Wrike did not consider rivets and high strength adhesives to be releasable fasteners. Benetton argues that the preferred embodiment described by the '466 and the '143 patents provides additional evidence for its claim construction. Specifically, the '466 patent (and the '143 patent, which is a continuation of the '466 patent and therefore contains a virtually identical disclosure to the '466 patent) states:

It is preferred that the fasteners be releasably attached to the frame flanges 32a, 32b, 32a', 32b' and sidewalls 50a, 50b so that if one of the sidewalls needs to be replaced, it can easily be removed conveniently without special tools or skills.

Benetton further notes that Wrike, during prosecution of the '584 patent, stated that the sidewalls of his invention "can easily be removed and replaced," thus allowing the skaters to change the wheels on the skate "quickly and easily."

Salomon makes arguments similar to Benetton, alleging that the '466 patent specification repeatedly uses the words "easily" and "without special tools or skills," to describe the releasability of the sidewalls. In particular, Salomon alleges that the '466 patent clearly distinguishes between fasteners that can be easily removed and reused without their destruction, such as threaded bolts, and fasteners that are difficult, if not impossible to remove, such as rivets or high-strength adhesives. Salomon adds that, as a matter of common sense, the scope of the term "releasably attaching" cannot be construed to reach any and all types of attachments. To further support its claim construction, Salomon cites *K-2 Corp. v. Salomon, S.A.,* which discusses the scope of the term "permanently affixed" for a patent assigned to K-2 Corp. 191 F.3d 1356 (Fed.Cir.1999). In *K-2,* the Court of Appeals for the Federal Circuit stated that, "the ordinary and accustomed meaning of "permanently affixed" [in the context of the K-2 patent] requires that the fastening be unremovable." *Id.* at 1363.

According to V-Formation's expert, rivets should be considered releasable because they can be removed by detaching either of the heads that hold the rivet in place. Addendum to Steven R. Thomas Declaration in Support of V-Formation's Opposition to Benetton's Motion for Summary Judgment ("Thomas Addendum"), pp. 28-29. V-Formation asserts that the '466 patent claims do not require that the "releasably attached" element be removable without destroying or damaging any part of the skate, and contends that nothing in the '466 patent specification places any limitation on the destruction of the fasteners in the course of releasing the sidewalls. Furthermore, V-Formation avers that nothing in the '466 patent claims requires the attachment be "quick and easy" or "easily removed and replaced." Even if the fastening element were

limited to attachments that could be easily removed, V-Formation submits that, like screws, rivets may be easily replaced in a matter of seconds.

V-Formation further argues that the defendants' claim construction arguments based on the prosecution history of the '584 patent cannot succeed because the "releasably attached" limitation in the initial application was introduced in the original claims and were never amended during prosecution. In addition, V-Formation, citing Abbott Labs. v. Dey, L.P., 287 F.3d 1097, 1104 (Fed.Cir.2002), contends that the defendants improperly argue that limitations from prior art, which was cited by the patent examiner during prosecution of the patent application that eventually lead to the issuance of the '584 patent, should be read into the disputed claim term.

I find V-Formation's arguments for its claim construction, on the whole, unpersuasive. While I agree with V-Formation's view that many of the arguments advanced by its opponents, which are grounded on the intrinsic evidence fail to unambiguously demonstrate the meaning of the term "releasably attached," I believe that the patent specification and prosecution history of the Wrike patents provides sufficient guidance to resolve the ambiguity of the disputed term. Upon consideration of the claims, I find no evidence that the claims, on their face, require that the sidewalls must be removable without destroying the means of attachment, as Benetton suggests, or that the fasteners must be capable of being removed and reused without special tools or skills, as Salmon suggests. Benetton and Salomon suggest that the Wrike patent specifications identify rivets and high strength adhesives to be non-releasable. The passage cited by them, however, says nothing about the perceived releasability of these types of fasteners. Although '466 and '143 patents describe a preferred embodiment in which the sidewalls can be removed without special tools or skills, I find nothing in the specifications of these two patents to support the view that the patentee has so limited the scope of the claims to exclude fastening means that requires special tools or skills. Scimed Life Systems, 242 F.3d at 1341. It is a cardinal sin of patent law for a court to "read into a claim a limitation from a preferred embodiment, if that limitation is not present in the claim itself." Bayer AG. v. Biovail Corp., 279 F.3d 1340, 1348 (Fed.Cir.2002); *see also* Benetton Sportsystem USA, Inc. v. First Team Sports, Inc., No. 02-1004, 2002 WL 1312678, at (Fed.Cir. June 14, 2002) (stating that it would be improper to conclude that merely because the preferred embodiment has a certain requirement that the claim language itself must then contain a similar requirement). Thus, I cannot adopt Salomon's construction, which requires that the claimed inventions must include sidewalls that can only be removed without special tools or skills.

On the basis of the file history and patent specification of the '584 and '466 patents, I am convinced that the term "releasably attached" means that the fasteners claimed in the Wrike patents must permit the sidewalls to be easily removed and replaced. The intrinsic evidence for each patent repeatedly emphasizes the ease with which the sidewalls can be removed and replaced. In the '584 patent specification, for instance, it states that "it is an object of the present invention to provide an in-line roller skate having a frame that includes sidewalls that can be *easily and inexpensively replaced* when damaged." (emphasis added). Elsewhere, the '584 patent indicates that the invention "allows users to replace one or both sidewalls without replacing the other components of the wheel frame. As a result, the user can inexpensively replace damaged sidewalls, *easily reconfigure the skate* to carry wheels of a different diameter, and use sidewalls with anodic coatings of different colors." 2:57-62. (emphasis added). During prosecution of the '584 patent, Wrike characterized the claimed inventions to have sidewalls that can be "*easily removed and replaced,*" which thus allows quick and easy change of the wheels on the skate. Polk Ex. 31, August 13, 1996 Amendment, p. 6 (emphasis added).

The criticality of the ease with which the fastener may be removed to permit replacement of the sidewalls is

also repeated by the '466 patent. For instance, the '466 patent states that "if one of the sidewalls [in the invention] needs to be removed from the skate frame to be replaced, it can *easily be removed without special tools or skills*." 7:25-27 (emphasis added). In view of this requirement, the '466 specification states that "another aspect of the invention is a repair kit for allowing for *faster or more convenient sidewall replacement*." 3:34-36. In view of the object sought by the '466 and '584 patents to provide a frame that include sidewalls that can be easily separated and singularly replaced ('466 patent, 2:39-44, 3:3-6; '584 patent, 2:57-60), I am convinced that the term "releasably attached" means that the fastening element claimed in the Wrike patents must be easily removed and replaced.

V-Formation disputes, however, whether rivets may be properly considered easily removed and replaced. To begin, the claims of a term must be construed to have the meaning that would be given by persons of ordinary skill in the relevant art, unless it is apparent from the patent and prosecution history that the inventor used the term with a different meaning. Dow Chemical, 257 F.3d at 1732; Vitronics, 90 F.3d at 1582. The prior art cited by the patent examiner during the prosecution of the '584 patent provides evidence of what one skilled in the art would consider "releasably attached." In a misguided effort, V-Formation argues, on the basis of *Abbott Laboratories,* that it is improper to rely on prior art cited by the examiner because it constitutes extrinsic evidence. V-Formation is incorrect. The passage referenced by V-Formation in *Abbott Laboratories* pertains to determining the scope of permissible equivalents under a doctrine of equivalents analysis, which is not relevant to claim construction. *See* 287 F.3d at 1104; *cf.* Southwall Technologies, Inc. v. Cardinal IG Co., 54 F.3d 1570, 1579 (Fed.Cir.1995). Prior art cited in the prosecution history falls within the category of intrinsic evidence and may be initially considered in construing a patent claim. Tate Access Floors, Inc. v. Interface Architectural Resources, Inc., 279 F.3d 1357, 1372, n. 4 (Fed.Cir.2002).

In the second office action to the priority patent application that lead to the eventual issuance of the '584 patent, the patent examiner rejected the submitted claims as being anticipated by United States Patent No. 5,549,310 ("the Meibock patent"). According to the Meibock patent, the toe and heel plates are described as "being *permanently* attached to the [boot sole] through the use of *rivets* or *releasably attached* through the use of fasteners such as *screws or bolts*." 4:53-56; *see also* 5:22-29. Furthermore, according to the Meibock patent, the frame sidewalls are "shown in the preferred embodiment [of the Meibock patent] as [being attached to the heel and toe plates by] a *screw and retainer* ... [although] any suitable releasable fastening device could be used. In alternate embodiments a more *permanent fastener such as a rivet* could also be used. The Meibock patent provides evidence that rivets are considered by persons of ordinary skill to be permanent fasteners.

I find it notable that the Meibock patent describes the in-line skate construction in strikingly similar language to that used in the Wrike patents. The Meibock patent states that "[t]he *frame and the base of the boot* are generally integrally molded as a single piece or *are permanently fastened together by riveting or bonding*." 1:36-40. By comparison, the Wrike patents state that the wheel frame may be secured to the base of the boot by rivets or high-strength adhesives (*e.g.,* bonding). '466 patent, 5:13-16; '584 patent, 4:4-6; '143 patent, 5:16-19. According to the Meibock patent, the permanence of the structure created by riveting or bonding "*prevents a user* from adjusting the location of the frame with respect to the boot or *from removing and exchanging one set of frames for another* set of frames of a different configuration. (1:36-43). In view of the distinction drawn by prior art, which was discussed and cited during prosecution of the '584 patent prosecution, between rivets and other fastening means, I am persuaded that those skilled in the art would not consider rivets (or high strength adhesives) to fall within the category of releasable fasteners. FN1 *See* Renishaw PLC v. Marposs Societa' per Azioni, 158 F.3d 1243, 1250 (Fed.Cir.1998) ("The construction

that stays true to the claim language and most naturally aligns with the patent's description of the invention will be, in the end, the correct construction."). FN2

FN1. Although the *K-2* case, which Salomon cites, is by no means controlling in the instant case, the *K-2* case appears to affirm my understanding of the nature of rivets, which I derived from the intrinsic evidence reviewed herein. 191 F.3d at 1365 ("Screws, unlike rivets and laminates, are meant to be unscrewed, that is, to be removed. A rivet or a laminate, to the contrary, is meant to remain permanent, unremovable unless one is bent on breaking the permanent structure apart.").

FN2. Although claim 1 of the '584 patent recites a "fastening means for releasably attaching" the sidewalls, which would ordinarily require a thorough analysis of the "corresponding structure" disclosed in the '584 specification and its equivalent, this analysis is unnecessary given the difference in function performed by rivets and releasable fasteners, such as screws and bolts. *See* Micro Chem., Inc. v. Great Plains Chem. Co., Inc., 194 F.3d 1250, 1257 (Fed.Cir.1999) ("[s. 112, para. 6] does not permit limitation of a means-plus-function claim by adopting a function different from that explicitly recited in the claim.").

C. Toe and Heel Plates

[3] Except for independent claim 17 and its dependent claims in the '466 patent, each claim of the Wrike patents requires toe and heel plate elements having an upper surface affixed to the corresponding toe and heel sole surface. *See e.g., supra,* claims 1 of the '584, '466, and '143 patents. Benetton and Salomon contend that the toe and heel plate elements must be construed to be separate elements from the skate boot. V-Formation asserts that the toe and heel plates in the Wrike in-line skate need not be distinct from the underside of the skate boot, and that the toe and/or heel plate could be formed as an integrated part of the bottom portion of the skate boot.

A plain reading of the claims shows that V-Formation's claim construction cannot be correct. Each of the claims in the Wrike patents that recite a toe and heel plate further requires that the plates "hav[e] an upper surface," which is affixed to the bottom portion of the skate boot. If the claimed toe or heel plate were an integral part of the bottom portion of the skate boot, as V-Formation suggests, the upper surface of the plate would not exist, which would render immaterial portions of the recited claim. "[S]pecific claim limitations [, however,] cannot be ignored as insignificant or immaterial." Perkin-Elmer Corp. v. Westinghouse Elec. Corp., 822 F.2d 1528, 1533 n. 8 (Fed.Cir.1987). If V-Formation's proposed claim construction were followed, the structural relationship between the upper surface of the plate elements and bottom portion of the skate book that is recited in the claims would be effectively and improperly eliminated.

The requirement that the toe and heel plates are separate from the skate boot is confirmed by the specification and file history of the '466 and '143 patents. These patents describe two alternative embodiments of the invention-one with toe and heel plates and one in which flanges form an integral body with the base of the skate boot. *See e.g.,* '143 patent, Figs. 1-5; *cf.* '143 patent, 6:65-7:5, Fig. 6; '466 patent, 6:62-7:2. During prosecution of the '143 patent, Wrike had submitted claims directed to both embodiments. Salomon Exh. 13 at V21-26. After examination by the patent examiner, however, Wrike cancelled the claims directed to the latter embodiment, id. at V85-92, demonstrating a clear and unequivocal surrender of the second embodiment disclosed by the '143 patent specification. Indeed, V-Formation admits that the integral skate boot disclosed by the '143 patent is not claimed by the '143 patent but rather is claimed in a

separate, related application (*i.e.*, claim 17 of the '466 patent). V-Formation Opp. Memo. to Salomon's Motion for Summary Judgment at 22. In view of the surrender of the integral skate boot embodiment during the '143 patent prosecution history, and V-Formation's own admission that this embodiment does not come within the scope of '143 claims, I am persuaded that "toe plate" and "heel plate" should be construed to mean structural elements that must be separate elements from the skate boot and have an actual and identifiable upper surface that is affixed to the sole surface of the skate boot.

IV. MOTION FOR SUMMARY JUDGMENT OF INVALIDITY OF THE '584 PATENT

[4] Salomon and Benetton both contend that the claims of the '584 patent are invalid because the claimed skates are anticipated (*i.e.*, lack novelty) by a skate called the "Ultra ST," which allegedly was sold in 1991, and a skate called the 2Extreme, which allegedly was developed and offered for sale in 1993. Both dates arise before January 17, 1995, the priority date of the '584 patent. Salomon and Benetton both contend that the alleged prior art skates were "known or used by others in this country," 35 U.S.C. s. 102(a), "made in this country," *id*. s. 102(g)(2), or described in a patent filed, *id*. s. 102(e)(2), before Wrike's invention date. Salomon and Benetton further contend that the alleged prior art skates were "in public use or on sale in this country" more than one year before the effective filing date of the '584 patent. *See id*. s. 102(b). In addition, Benetton asserts that the '584 claims are invalid because they are obvious in view of other prior art. Salomon and Benetton bear the burden of proving by clear and convincing evidence that the in-line skates relied on by them constitutes "prior art" under 35 U.S.C. s. 102. Mahurkar v. C.R. Bard, Inc., 79 F.3d 1572, 1576 (Fed.Cir.1996). I find that Salomon and Benetton have met their burden. FN3

FN3. Because the defendants have met their burden of showing that the Ultra-ST skate anticipates the challenged claims of the '584 patent, I need not decide whether the 2Extreme also constitutes anticipatory prior art.

According to 35 U.S.C. s. 102(a), a person is not entitled to a claimed invention if the "the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the application for patent." Woodland Trust v. Flowertree Nursery, Inc., 148 F.3d 1368, 1370 (Fed.Cir.1998) ("If the invention was known to or used by others in this country before the date of the patentee's invention, the later inventor has not contributed to the store of knowledge, and has no entitlement to a patent."). The Ultra-ST skates proffered by the defendants appear to have been publicized before the priority date of the '584 patent. *See* Salomon Exh. 17 at 22 (depicting a photograph of Ultra-ST in a 1993 book on in-line skating); Salomon Exh. 23, LAV 7 (displaying Ultra-ST in a 1991 sales brochure); Exh. 18 at 32.

V-Formation argues that the Ultra-ST skates were not in public use. As evidence, V-Formation points to the Declaration of John Svennson, the inventor of the Ultra-ST, which states that he sometimes showed skates that he "was working on" to members of his skate team for their opinion, and that he trusted them not to reveal these ideas to the public. Thomas Decl. in Support of V-Formation's Opposition to Benetton's Motion for Summary Judgment ("Thomas Decl."), Exh. R at para. 5. Svennson states nothing in his Declaration, however, which would indicate that the Ultra-ST skates were among the skates that he expected to be kept secret. Indeed, the distribution of a full color 1991 sales brochure by his sponsor, Ultra-Wheels, at in-line skating races and trade shows, Salomon Exh. 23 at 22 and Exh. 39 (Lavelle Depo.) at 49, along with the Ultra-ST informational sheet that apparently was inserted with the brochure, Salomon Exh. 24, Salomon Exh. 38 (Svensson Depo.) at 42-43, and the 1993 in-line skating book that Svennson co-authored, which

plainly shows the Ultra-ST skate, Salomon Exh. 23 at LAV 7, all suggest that there was very little attempt to preserve the secrecy of the skate and its features. Knowledge and use by others is independently corroborated by John Lavelle, manager of a race team for Ultra-Wheels out of Minnesota. According to Lavelle, his team was also responsible for promoting products for Ultra-Wheels, including the Ultra-ST, in 1991 at races in which the team participated. Salomon Exh. 39 at 49-50. Lavelle recalled that the specific in-line skates that the defendants rely on were publically used, in fact, at a marathon skate race by his wife in March 1991. Id. at 38-39. As evidence that Svennson did not consider the Ultra-ST skates in public use or sold in 1991, V-Formation notes that he did not cite to the Patent and Trademark Office the skates as prior art in patent applications that he had filed in 1993 and 1994. Contrary to V-Formation's contention, Svennson did not have an "absolute duty" to disclose "any material of which he is aware that might be considered prior art." V-Formation Opp. Memo at 13. To the contrary, he had an obligation to submit only prior art that he considered "material to patentability." 37 C.F.R. 1.56. V-Formation, however, presents no evidence, besides its own conjecture, that Svensson considered the Ultra-ST material to patentability, but which he declined to disclose because he did not consider it prior art.

V-Formation observes that First Team Sports, current owner of the Ultra-ST skates, entered into a license agreement with Wrike to practice some of the Wrike patents, Thomas Decl., Exh. H, and that First Team Sports expressly acknowledged the validity of the V-Formation patents, including the '584 patent, in a settlement agreement, Id., Exh. W. From these observations, V-Formation draws the conclusion that First Team Sports could not invalidate the '584 patent, despite its awareness of the Ultra-ST skates, which the defendants now rely on to support the alleged invalidity of the patent. Neither piece of evidence cited by V-Formation support its conclusion or the inference that First Team Sports entered these agreements because it considered the '584 patent valid. First, the license agreement provides that First Team Sports will *not* pay for any past, present, or future royalties for the '584 patent. This fact, alone, would seem to undermine V-Formation's claim that First Team Sports paid homage to the validity of the '584 patent. Second, only Gen-X, a co-defendant to First Team Sports in another lawsuit instituted by V-Formation, expressly acknowledges the validity of V-Formation's patents. *See* Thomas Decl., Exh. W, para. C under "Recitals". First Team Sports makes no such warranty about the '584 patent's validity in the settlement.

V-Formation further argues that any skates used by Svennson and his racing team from 1991 to 1992 were solely for experimental purposes. In support of this argument, V-Formation refers to an opinion rendered by another court in regard to another patent, which states that it determined that the soft-shoe in-line skate-at-issue in the case was used by Svennson only twice in 1990 or 1991 and was not an operative invention because the skate was worn on only "one foot while a traditional body skate was worn on the other." Thomas Rebuttal Decl., Exh 14 at 6 (*K2 Corp. v. Salomon SA et al.,* No. C98-1781, at 6 (W.D.Wash. Mar. 30, 1999)). The opinion makes no mention of the Ultra-ST skate nor does V-Formation cite to any evidence that establishes a nexus between the aforementioned "soft-shoe" in-line skate and the Ultra-ST. Indeed, Svennson described using the Ultra-ST skates in 1991 for a 1,500 mile trip along the west coast, which would seem to suggest at least two things. Salomon Exh. 24. First, the daily usage over two weeks that was required to traverse the 1,500 miles suggests that Svennson used the Ultra-ST skates more than "twice" FN4 in 1991, and thus it seems unlikely that the court hearing the *K2* case was referring to the same skate. Second, I find it highly doubtful that Svennson "was not convinced that the invention would perform as intended," as the *K2* opinion implied with respect to the soft-shoe in-line skate-at-issue in that case, after he had traveled hundreds of miles on the Ultra-ST during the west coast trip. Svensson's successful travel using the commercial embodiment of the Ultra-ST suggests that the skates worked for their intended purpose, and therefore the skates were reduced to practice before the priority date of the '584 patent. Salomon Exh. 38 (Svensson Depo.) at 37.

FN4. I am hopeful, at least, that he took his skates off more than twice over the duration of his two week trip.

The specific Ultra-ST skates, which the defendants rely on to demonstrate that this skate model anticipated the claims of the '584 patent, were customized by Svennson for Lavelle's wife, a racer sponsored by First Team Sports. To accommodate the size of her feet, Svennson shortened the sidewall, which cut off the "T" at the end of the Ultra-ST trademark on the sidewall. Salomon Exh. 39 (Lavelle Depo.) at 14; Salomon Exh. 22 at S4347. V-Formation objects to the use of these skates because it contends that they are not representative of the Ultra-ST skate model, or in the alternative, the skates were made for experimental purpose. In support of its contentions, V-Formation's expert, Steven Thomas, notes that in comparison to the model depicted in the 1991 brochure, the customized Ultra-ST skate has shorter sidewalls and different size ventilation holes. Thomas Decl. in Opposition to Summary Judgment for Non-Infringement and Invalidity at para. 61. Neither of these modifications, however, influences the skate features that are relevant to the analysis I must perform to determine whether the product contains all the limitations recited by the '584 claims. Thomas further observes that the toe and heel plate appear to have been made from "off the shelf" aluminum stock, and cites this as evidence that this skate was a prototype level construction. Id. According to Lavelle, however, the Ultra-ST trademark name, which is prominently displayed on the modified skates, was not used until the skates came out as a production product. Salomon Exh. 39 (Lavelle Depo.) at 69. Thus, V-Formation's contention that the modified Ultra-ST skates are not representative of the relevant features described by Ultra-Wheel's 1991 brochure appears to be nothing more than conjecture and speculation, which is insufficient to create a genuine issue of material fact. Kerzer v. Kingly Mfg., 156 F.3d 396, 400 (2d Cir.1998).

In view of all the pertinent documentary evidence and testimony under the "rule of reason," I am convinced that there is sufficient circumstantial evidence to corroborate Svensson's testimony that his Ultra-ST skates were invented before the priority date of the '584 patent. Price v. Symsek, 988 F.2d 1187, 1195 (Fed.Cir.1993). Next, I must determine whether the skates are the same as those claimed by the '584 patent to decide whether it constitutes s. 102(a) art. Hoover Group, Inc. v. Custom Metalcraft, Inc., 66 F.3d 299, 302 (Fed.Cir.1995). The analysis of whether the in-line skates are the same invention as that claimed by the '584 patent is congruent with that conducted to determine infringement. Lewmar Marine, Inc. v. Barient, Inc., 827 F.2d 744, 747 (Fed.Cir.1987) ("The inquiry as to anticipation is symmetrical with the inquiry as to [literal] infringement of a patent.").

The defendants challenge all but two of the '584 patent claims (claims 2 and 12) as invalid. The '584 patent has a total of twelve claims. Each of the independent claims (claims 1 and 7) calls for an in-line skate comprising a boot; a frame comprising a toe and heel plate, wherein the upper surface of each plate is affixed to the corresponding sole portion of the boot, sidewalls that are (i) devoid of transverse projections, (ii) releasably attached to the lateral surface of the plates, and (iii) made of a material that is different from that composing the toe and heel plates; and wheels that are rotatably mounted between the sidewalls on an axle. Claim 7 also requires that the sidewalls are made of a material that is more rigid than the material of the toe and heel plates. Claims 3 and 9 require that the sidewalls are substantially structurally identical. Claims 4 and 10 require sidewalls formed from titanium, and claims 5 and 11 require the skates to have between three and six rotatably mounted wheels. An element by element analysis of the allegedly anticipatory Ultra-ST is provided below.

As shown in the picture depicted in Salomon Exhibit 7, the Ultra-ST is an in-line skate comprising a boot and a frame. The frame has a toe and heel plate, each affixed to the corresponding sole portion of the boot. Salomon Exh. 12. The sidewalls are flat and are releasably attached to the lateral surface of the toe and heel plates. Salomon Exhs. 10-12. Furthermore, the sidewalls are made of titanium and are therefore made of a material that is different and stiffer than the toe and heel plate, which is made of aluminum. Salomon Exh. 23 at LAV7; Exh. 24, Exh. 39 (Svennson Depo.) at 34-40; McDonald Decl., para. 7. The Ultra-ST, accordingly, anticipates all the limitations of claims 1, 4, 7 and 10. As shown in Salomon Exhibit 11, the sidewalls are substantially structurally identical, thus destroying the novelty of claims 3 and 9. Lastly, the Ultra-ST has five wheels, which falls within the prescribed limitation of claims 5 and 11. Salomon Exh. 7. Accordingly, the defendants have demonstrated that the Ultra-ST was "known or used by others in this country" before the priority date of the '584 patent and contains all the elements of claims 1 and 3 through 11 of that patent.

To overcome summary judgment of invalidity based on s. 102(a), V-Formation bears the burden of coming forward with evidence to demonstrate an invention date preceding that of the Ultra-ST. Loral Fairchild Corp. v. Matsushita Elec. Indus. Co., 266 F.3d 1358, 1361 (Fed.Cir.2001); Mahurkar v. C.R. Bard, 79 F.3d 1572, 1576 (Fed.Cir.1996). I find that it has not met its burden of production. Although Wrike testified that he first conceived of the '584 invention in or around August 1989, Thomas Decl., Exh. D (Wrike Depo.) at 51-52, his testimony, standing alone is insufficient to prove conception. Woodland, 148 F.3d at 1371; Price, 988 F.2d at 1194 ("inventor's testimony respecting facts surrounding a claim of derivation or priority of invention cannot, standing alone, rise to the level of clear and convincing proof."). Although V-Formation proffers sketches of prototypes made by Wrike to corroborate his testimony that he had conceived of all aspects of the '584 invention around 1989, Thomas Decl., Exh. B, Wrike admits that nothing in these sketches gives the slightest indication that he intended the sidewalls to be made of a different material than the toe and heel plates. Polk Exh. 26 (Wrike Depo.) at 57. As further corroboration, V-Formation refers to pictures of skate frames that he had allegedly made around 1989. Thomas Decl., Exh. E. The pictures, alone, however, provide no indication of whether the side walls are made of a different material than the toe and heel plates. Without such corroboration of this limitation that is recited in both the independent claims of the '584 patent, V-Formation's claim to an invention date earlier than the '584 patent's priority date is inadequate as a matter of law. Juicy Whip, Inc. v. Orange Bang, Inc., 292 F.3d 728, 738 (Fed.Cir.2002) (writing offered to corroborate testimony of prior invention was insufficient because the writing did not corroborate at least one limitation claimed by the patent-at-issue). The defendants' motion for summary judgment of invalidity of claims 1 and 3 through 11 of the '584 patent is granted.

IV. MOTION FOR SUMMARY JUDGMENT OF NON-INFRINGEMENT

A. Literal Infringement

Having construed the disputed claim terms, the next step of my infringement analysis entails comparing the elements of the remaining valid and allegedly infringed claims to the accused products.

1. Benetton's Accused Products

According to Benetton, its skate models can be grouped into eight categories that share certain common structural features. V-Formation's expert, Steven R. Thomas, admits that the construction of Benetton's "Formula" brand skate (Category 8) does not appear to be modular, and therefore does not infringe the Wrike patents. Thomas Decl., para. 3. V-Formation contends that the remaining seven categories of Benetton's skate models literally infringe one or more of the Wrike patents. Categories 2, 4, 5, and 6 of

Benetton's skates, however, allegedly infringe only some combination of claims 1 and 3 through 11 of the '584 patent, which I have determined to be invalid. Thus, Benetton's motion for summary judgment of non-infringement of the '584 patent by categories 2, 4, 5, 6 and 8 of its skates is granted.

For the following reasons, I find that categories 1 and 7 do not literally infringe any of the remaining valid claims identified by V-Formation's expert. Lastly, while Benetton's category 3 skates do not literally infringe claims of the '466 patent, I find that Benetton has not demonstrated that skates in this category do not literally infringe the claims of the '143 patent.

Category I

[5] Skates in this category include various versions of Viablade and the Triax skates. V-Formation contends that these skate models infringe claims 1, 3, 4, 7, 9, 11, 12, 15, 17, 18 and 19 of the '466 patent. *See* Thomas Addendum, p. 29. These skate models are formed from two interlocking pieces of molded plastic. Polk Decl., para. 7; *see, e.g.,* Thomas Addendum, Appendix A, photos 17-19. The skates in this category infringe neither claims 1 or 9 and their respective dependent claims because these skates do not have toe or heel plates consisting of "two pair of spaced apart flanges extending downwardly" from it, but rather have flanges molded directly into the base of the boot. *See* Polk Decl., para. 8, Exh. 5. In addition, the sidewalls on the skates in this category are not attached to "spaced apart flange pairs" as called for by claim 17 and its dependent claims. *See* Polk Decl., para. 8, Exh. 6. Accordingly, none of Benetton's category 1 skates literally infringe any claims of the '466 patent.

Category 3

[6] Skates in this category include the Burner 451, e5.5, e4.3, e5, and ePro skates. V-Formation alleges that most, if not all of these skate models infringe claims 1, 2, 3, 7, 9, 10, 11, 15, 17, 18, and 19 of the '466 patent, and claims 1, 2, 4, 5, 7, and 9 of the '143 patent. *See* Thomas Addendum, p. 36. None of the skates in this category literally infringe any claims of the '466 patents because the sidewalls on these skates are not releasably attached. In each skate model, the plastic or metal sidewalls are riveted to the front and rear mounting structures. *See* Polk Decl., para. 11 and Exhs. 11-12, 14 (depicting a representative example of Category 3 skates having sidewalls fastened by rivets).

Benetton argues that the sole reason the skates in this category do not infringe the '143 patent is because the rivets in these skates extend through both sidewalls, whereas the claims of the '143 patent recite that the fasteners "extend[ ] through *one* of said sidewalls and a cavity inner wall." Polk Decl., para. 12; *see, e.g.,* '143 patent, claim 1 (emphasis added). The '143 claims, however, do not require that the fasteners extend through *only* one sidewall as Benetton seems to suggest. As shown in Exhibit 13 of the Polk Declaration, the fasteners in this category of skate extend through at least one of the sidewalls and a cavity inner wall. Accordingly, Benetton has not demonstrated that skates in category 3 do not infringe the asserted claims of the '143 patent.

Category 7

[7] Skates in this category include the Pro44 skate. V-Formation contends that the Pro44 skate infringes claims 1, 2, 3, 4, 7, 9, 10, 11, 12, 15, 17, 18, and 19 of the '466 patent, and claims 1, 2, 4, 5, 7, and 9 of the '143 patent. *See* Thomas Addendum, p. 58. The Pro44 skate does not literally infringe any claims of the '466 patents because the sidewalls of the Pro44 skate are not releasably attached, but rather are riveted to the front and rear plastic spacers that form the skate frame. *See* Polk Decl., para.para. 19-20 and Exhs. 25-26

(depicting Pro44 skates having sidewalls fastened by rivets). In addition, the Pro44 does not have flange pairs on toe or heel plates to form a "pair of spaced apart downwardly opening cavities," but rather it has only outer flanges molded directly to the sole of the skate boot. *See* Polk Decl., Exhs 25-26 (showing the lack of toe or heel plates having flange pairs attached to the sole of the skate boot); Thomas Addendum, p. 57. Thus, the Pro44 does not have either a toe or heel plate with an inner and outer wall to literally infringe any claims of the '143 patent.

2. Salomon's Accused Products

[8] Salomon's accused products may be divided into three major categories-(1) the "classic" frame; (2) the "twin metal" frame, and (3), the "dual flange" frame. Declaration of Jean-Louis de Marchi ("de Marchi Decl."), para.para. 12, 16, 21. Each of Salomon's in-line skates have rivets that secure the sidewalls to the frame, and thus are not releasably attached as required by the claims of the '466 patents. *See* de Marchi Decl., para. 12, Exh. 28; Expert Report of Steven R. Thomas ("Thomas Report") at 28, 34, 46, 52, Appendix A, photos 1-4, 6, 8, 17, Appendix B, photos 1-4, 13-15, 18-22, Appendix C, photos 1, 2, 4, 7, Appendix D, photos 2, 8, 10. Accordingly, none of the claims of the '466 patent are literally infringed by Salomon's skates.

Salomon contends that its skates have flanges integrally molded into the sole of their skate boot. de Marchi Decl., para. 30. After reviewing representative examples of Salomon's skates that were submitted by both Salomon and V-Formation, I find that all the skates have flanges integrally molded into the sole of the skate boot, and therefore do not literally infringe any claims of the '143 patent. *See* V-Formation Exh. 4; Salomon Exh. 32B, Salomon AC7 skate exhibit.

B. Infringement Under The Doctrine of Equivalents

The accused products made by Benetton and Salomon that do not literally infringe any claims of the Wrike patents may, nonetheless, still infringe the claims under the "doctrine of equivalents" if each limitation of the claim is met in the accused product either literally or equivalently. Warner-Jenkinson Co. v. Hilton Davis Chem. Co., 520 U.S. 17, 21, 40, 117 S.Ct. 1040, 137 L.Ed.2d 146 (1997). A claim limitation may be found to be an equivalent in the accused product or process if there is an "insubstantial difference" between the claim limitation and the structure of the product or act involved in the process. Warner-Jenkinson Co., 520 U.S. at 29, 39; DeMarini Sports, Inc. v. Worth, Inc., 239 F.3d 1314, 1331 (Fed.Cir.2001). The difference is insubstantial if the allegedly infringing element performs: (i) substantially the same function; (ii) in substantially the same way; (iii) to obtain substantially the same result, as the claimed element. Warner-Jenkinson, 520 U.S. at 40; Graver Tank & Mfg. Co. v. Linde Air Prods. Co., 339 U.S. 605, 608, 70 S.Ct. 854, 94 L.Ed. 1097 (1950).

The doctrine of equivalents, however, has certain limitations. First, the doctrine of equivalents cannot extend or enlarge the scope of the claims. Dolly, Inc. v. Spalding & Evenflo Co., 16 F.3d 394, 398 (Fed.Cir.1994). According to the Federal Circuit, "the claims *i.e.* the scope of patent protection *as defined by* the claims-remain the same and application of the doctrine *expands the right to exclude* to 'equivalents' of what is claimed." Wilson Sporting Goods Co. v. David Geoffrey & Assocs., 904 F.2d 677, 684 (Fed.Cir.1990)(emphasis in original). Furthermore, the doctrine of equivalents cannot be used to protect subject matter that was surrendered by the patent holder during the prosecution of the patent. Biovail Corp. Int'l v. Andrx Pharmaceuticals, Inc., 239 F.3d 1297, 1303 (Fed.Cir.2001). "Estoppel arises when an amendment is made to secure the patent and the amendment narrows the patent's scope.... A patentee who narrows a claims as a condition for obtaining a patent disavows his claim to the broader subject matter,

whether the amendment was made to avoid the prior art or to comply with s. 112." Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 535 U.S. 722, 122 S.Ct. 1831, 1840, 152 L.Ed.2d 944 (2002). If evinced by clear and unmistakable surrender of subject matter, arguments made during the prosecution history estoppel may also prevent a patentee from relying on the doctrine of equivalents. Eagle Comtronics, Inc. v. Arrow Communication, 305 F.3d 1303, 1315 (Fed.Cir.2002).

To determine what subject matter a patentee has relinquished, an objective test is applied, inquiring "whether a competitor would reasonably believe that the applicant had surrendered the relevant subject matter." Cybor Corp. v. FAS Techs., Inc., 138 F.3d 1448, 1457 (Fed.Cir.1998)). "[A] concession made or position taken to establish patentability in view of prior art on which the examiner has relied, is a substantive position on the technology for which a patent is sought, and will generally generate an estoppel." Pall Corp. v. Micron Separations, Inc., 66 F.3d 1211, 1220 (Fed.Cir.1995). Finally, if an element is entirely missing from the accused product, there can be no equivalence as a matter of law. DeMarini, 239 F.3d at 1332; Zodiac Pool Care, Inc. v. Hoffinger Indus., Inc., 206 F.3d 1408, 1415-16 (Fed.Cir.2000).

1. "Releasably Attached" or "Releasably Attaching"

[9] As discussed above, the prior art, exemplified by the Meibock patent, demonstrates that a person skilled in the art would not consider rivets to be releasably attachable fasteners. Unlike releasable fasteners, such as screws or bolts, which may be quickly and easily removed without special tools, rivets can be removed only by drilling it out or otherwise breaking and/or deforming it. Polk Decl., para. 39; Thomas Rep. at 28-29, 34, 47, 52. Because of the potential damage that the frame may incur from removing the rivets by the drilling or hammering required to remove the rivet, Benetton does not sell separate sidewalls, but rather the entire frame is sold as a complete pre-assembled unit. Polk Decl., para. 39. I find the context in which Wrike mentions using rivets in his invention indicative that he too does not consider rivets to be interchangeable with releasably attachable fasteners, such as screws or bolts. Perkin-Elmer Corp. v. Westinghouse Electric Corp., 822 F.2d 1528, 1535 (Fed.Cir.1987) (stating that whether "persons skilled in the art would have known of the interchangeability of claimed with unclaimed elements is a factor in considering equivalence"). Wrike suggests using "rivets or high strength adhesives" to attach the toe and heel plates to the skate, which, according to the Meibock patent, are generally "permanently fastened by riveting or bonding." '584 patent, 4:4-6; Meibock patent, 1:36-43. By contrast, Wrike mentions that the sidewalls may be releasably attached to flanges with threaded bolts and "other releasable fasteners." '584 patent, 5:1-4. Thus, while Wrike suggests using rivets to fasten pieces that are generally permanently fastened, he neither teaches nor suggests that rivets belongs to the class of releasable fasteners, such as threaded bolts. In view of the difficulty of removing rivets compared to well recognized releasable fasteners, such as screws and threaded bolts, and the apparent perceived lack of interchangeability of rivets with such fasteners, I am persuaded that the accused products with rivets do not perform substantially the same function to produce substantially the same result as in-line skates having releasable fasteners. Accordingly, I find that neither Benetton's skates in categories 3 and 7 nor Salomon's skates infringe under the doctrine of equivalents any claims of the '466 patent. Dolly, 16 F.3d at 397, and thus with respect to these categories of Benetton's skates and Salomon's skates, their motion for summary judgment of non-infringement is granted.

2. Toe and Heel Plates

[10] In each of the accused products that were found not to literally infringe the toe and heel plate limitation of the '466 or '143 patent, the accused product lacked toe and heel plates consisting of "two pair of spaced apart flanges extending downwardly" from the base of the boot. The question of whether an element in the accused product is substantially different from the claimed element is inapplicable if a claim limitation is

totally missing from the accused product. *See* Warner-Jenkinson, 520 U.S. at 33-34; Pennwalt Corp. v. Durand-Wayland, Inc., 833 F.2d 931, 934-35, 939 (Fed.Cir.1987) (en banc). V-Formation argues that the claims reciting toe and heel plates may encompass products whose the toe and heel plate are an integral part of the skate boot underside. Although an infringer cannot avoid patent claims by simply combining two claim elements into a single-structure, Dolly, 16 F.3d at 398, the doctrine "is not a license to ignore or erase structural or functional limitations of the claim." Abbott Labs. v. Dey, L.P., 287 F.3d 1097, 1107 (Fed.Cir.2002) (quoting Athletic Alternatives, Inc. v. Prince Mfg., Inc., 73 F.3d 1573, 1581 (Fed.Cir.1996). The Supreme Court, in discussing the application of the doctrine of equivalents to individual claim limitations, stated that "[i]t is important to ensure that the application of the doctrine, even as to an individual element, is not allowed such broad play as to effectively eliminate that element in its entirety." Warner-Jenkinson, 520 U.S. at 29; *see also* DeMarini Sports, Inc. v. Worth, Inc., 239 F.3d 1314, 1331 (Fed.Cir.2001). Under this principle, sometimes referred to as the "all-limitations rule," "[n]o claimed [limitation], or an equivalent thereof, can be absent if the doctrine of equivalents is [to be properly] invoked." Kustom Signals Inc. v. Applied Concepts, Inc., 264 F.3d 1326, 1333 (Fed.Cir.2001). Were I to read the integrally molded skate boot that is found in the accused products to be equivalent to the combination of a toe and heel plate attached to the sole surface of the skate boot, the remaining limitations found in the toe and heel plate clause (*i.e.,* the attachment of the upper surface of the toe or heel plate to the sole surface of the skate boot) would become immaterial, violating the all-limitations rule.

[11] Furthermore, under the doctrine of prosecution history estoppel, Wrike's decision to surrender claims to integrally molded skate boots while retaining the language of the toe and heel plate clauses in the claims of the '143 patent prosecution, Salomon Exh., pp. V21-26, may be presumed to be a general disclaimer of the surrendered subject matter. Allen Engineering Corp. v. Bartell Industries, Inc., 299 F.3d 1336, 1350-51 (Fed.Cir.2002). The Supreme Court placed the burden on the patentee to show that an amendment was not for purposes of patentability. Warner-Jenkinson, 520 U.S. at 33. V-Formation has made no showing, however, to overcome the presumption. Schwing GmbH v. Putzmeister Aktiengesellschaft, 305 F.3d 1318, 1330 (Fed.Cir.2002) (stating that the presumption that an amendment constitutes a surrender to equivalent subject matter may be rebutted if the patentee shows that the "asserted equivalent was unforeseeable, that the rationale underlying the amendment bears only a tangential relation to the equivalent in question, or that there is some other reason that the patentee could not reasonably be expected to have described the substitute in question"). Given Wrike's choice to retain claims with the clauses containing the toe and heel plate, which admittedly do not encompass integrally molded skate boots, the doctrine bars V-Formation from now asserting that integrally molded skate boots are equivalent to toe and heel plates "having an upper surface affixed to said sole surface" of the skate boot. Festo, 122 S.Ct. at 1839, Eagle Comtronics, 305 F.3d at 1315. Accordingly, I find that categories 1 and 7 of Benetton's skates do not infringe under the doctrine of equivalents the claims of either the '466 or '143 patent, and thus Benetton's motion for summary judgment of non-infringement is granted for these categories of skates.

III. CONCLUSION

For the foregoing reasons, I am granting Benetton's and Salomon's motion for summary judgment of invalidity of claims 1 and 3 through 11 of the '584 patent. In addition, I must grant Benetton's motion for summary judgment of non-infringement of categories 1, 2, and 4 through 8 of its skates, and Salomon's motion for summary judgment of non-infringement of all of its accused products.FN5 I find that Benetton, however, has not demonstrated the absence of genuine issues of material fact surrounding the non-infringement of the '143 patent by its skates in category 3. Trial will commence on December 20, 2002 and continue onto December 23 and 26, if necessary.

FN5. Having granted Salomon summary judgment of non-infringement and invalidity, Salomon's motion to strike evidence from V-Formation's Opposition to Salomon's Motions for Summary Judgment is moot.

SO ORDERED

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