Velcro Indus. v. Taiwan Paiho Limited CV-04-242-JD 03/02/05
UNITED STATES DISTRICT COURT FOR THE
DISTRICT OF NEW HAMPSHIRE

Velcro Industries B.V.
and Velcro USA Inc.

v. Civil No. 04-242-JD
Opinion No. 2005 DNH 035

Taiwan Paiho Limited

O R D E R

The plaintiffs, Velcro Industries B.V. and Velcro U.S.A. Inc. (collectively, "Velcro"), allege that defendant Taiwan Paiho Limited ("Paiho") has infringed Velcro's patents for a method of continuously producing a multi-hook fastener member and the member itself, United States Patent Nos. 4,794,028 and 4,872,243. The parties differ over the meanings of the terms "extrusion" and "means for providing pressure" as they appear in the patent claims. The court has received briefing from the parties and held oral argument on these claim construction issues.

Standard of Review

"It is a bedrock principle of patent law that the claims of a patent define the invention to which the patentee is entitled the right to exclude." Innova/Pure Water, Inc. v. Safari Water Filtration Sys., 381 F.3d 1111, 1115 (Fed. Cir. 2004). The meaning of language in a patent claim presents a question of law

for the court to decide. Markman v. Westview Instruments, Inc., 517 U.S. 370, 388 (1996). "In the absence of an express intent to impart a novel meaning to the claim terms, the words take on the full breadth of the ordinary and customary meanings attributed to them by those of ordinary skill in the art." NTP, Inc. v. Research in Motion, Ltd., 392 F.3d 1336, 1346 (Fed. Cir. 2004); see also, e.g., Metabolite Labs., Inc. v. Lab. Corp. of Am. Holdings, 370 F.3d 1354, 1360 (Fed. Cir. 2004); Tate Access Floors, Inc. v. Interface Architectural Res., Inc., 279 F.3d 1357, 1370 (Fed. Cir. 2002).

To ascertain this meaning, the court must first examine the intrinsic evidence, which includes the claims themselves, the specifications, and any prosecution history submitted by the litigants. E.g., Goldenberg v. Cytogen, Inc., 373 F.3d 1158, 1164 (Fed. Cir. 2004) (citing Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996)). The court starts with the actual language of the claim. E.g., Int'l Rectifier Corp. v. IXYS Corp., 361 F.3d 1363, 1370 (Fed. Cir. 2004); 3M Innovative Props. Co. v. Avery Dennison Corp., 350 F.3d 1365, 1370 (Fed. Cir. 2003), cert. denied, 124 S. Ct. 2877 (2004). "If the claim language is clear on its face, then [the] consideration of the rest of the intrinsic evidence is restricted to determining if a deviation from the clear language of the claims

is specified." Interactive Gift Express, Inc. v. Compuserve, Inc., 256 F.3d 1323, 1331 (Fed. Cir. 2001); see also Int'l Rectifier, 361 F.3d at 1370; Anchor Wall Sys., Inc. v. Rockwood Retaining Walls, Inc., 340 F.3d 1298, 1306-1307 (Fed. Cir. 2003).

Although the court must therefore construe the claims in light of the specifications, it must take care not to read limitations from the specifications into the claims. Innova/Pure Water, 381 F.3d at 1117; Liebel-Flarsheim Co. v. Medrad, Inc., 358 F.3d 898, 904 (Fed. Cir.), cert. denied, 125 S. Ct. 316 (2004). "If the meaning of the claim limitations is apparent from the totality of the intrinsic evidence, then the claim has been construed." Interactive Gift, 256 F.3d at 1332. If, and only if, a "genuine ambiguity" still persists, the court may turn to extrinsic evidence, such as expert testimony, to interpret the claim. Intel Corp. v. VIA Techs., Inc., 319 F.3d 1357, 1367 (Fed. Cir. 2003) (citing Vitronics, 90 F.3d at 1582); see also, e.g., Sunrace Roots Enter. Co. v. SRAM Corp., 336 F.3d 1298, 1307 (Fed. Cir. 2003).

Background

Velcro took an assignment of the '028 and '243 patents from their inventor, James R. Fischer. As set forth in the

"Background" section to each patent,[1] "[s]trip-like fastener members having a great multiplicity of closely-spaced upstanding hook-like projections" are used in conjunction with strips of interfacing loops to provide an effective means of joining elements that will be repeatedly separated and reunited, such as the lapels of a coat. '028 patent, col. 1, lines 18-37. Prior to Fischer's invention, however, methods of manufacturing the fastener members had been limited to "relatively complex forming devices and/or processes." Id., col. 1, lines 46-50. One such method, patented by Marvin Menzin and others, featured

> a drum-like apparatus which includes a relatively complex arrangement of shiftable plates at its periphery which define cavities for forming hook-like projections. A plastic extruder is provided in close association with the drum so that as the drum rotates, plastic is injected into the hook-shaped cavities and is joined to a backing strip. Removal of the fastener member thus formed is accomplished by inwardly shifting alternate ones of the cavity-defining plates so that the cavities are opened . . . .

Id., col. 1, line 66 to col. 2, line 8.

Fischer proposed to simplify the manufacture through a method calling for the extrusion of molten plastic between two

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[1]As Velcro explained at oral argument, the '243 patent constitutes a "division" of the '028 patent, meaning that the two patents are identical in all respects but their claims. See Herbert F. Schwartz, Patent Law and Practice § 2.III.D.6.c, at 26 (3d ed. 2001). Accordingly, the court will cite to the '028 patent only, except for the language of the claims themselves.

rotating drums, one of which is cooled and has been imprinted with hook-shaped cavities. Id., col. 2, lines 27-40. The plastic fills the cavities to form the hooks, which, through the calibrated rotation of the drums, are removed just after the hooks have fully formed but just before they have cooled enough to adhere to the cavities and become deformed. Id., col. 3, lines 36-50. Fischer initially received a patent claiming, in relevant part,

> A method suitable for producing an elongated strip-like fastener member having a base portion and a great multiplicity of hook-like project [*sic*] . . . comprising the steps of:
>
> > forming a strip-like extrusion of molten plastic material;
> >
> > . . .
> >
> > directing said extrusion between said first and second rollers at an interface thereof so that said plastic material fills [the] hook-forming cavities to form said base portion of said strip-like fastener member . . . .

Id., col. 11, lines 8-31 [claim 7]. The '028 patent also claims

> A method suitable for continuously producing an elongate strip-like member on an apparatus having a first cooled, forming roller defining a plurality of hook-forming cavities . . . [and] means for providing pressure toward said forming roller, comprising the steps of directing a strip-like extrusion of molten plastic material in between said forming roller and said pressure means at an interface thereof such that said plastic material fills said hook-forming cavities to form a base portion . . . .

Id., col. 14, lines 24-38 [claim 22].

The subsequent '243 patent claims, also in relevant part,

> An elongate member, comprising: a base portion, and a great multiplicity of resiliently flexible hook-like projections . . . said base portion and integral projections being formed from an extrusion of molten plastic material by . . . directing said extrusion in between [the] rollers at an interface thereof so that said plastic material fills [the] hook-forming cavities to form said base portion . . . .

'243 patent, col. 10, lines 9-33 [claim 1]. The '028 patent and the '243 patent expire on December 27, 2005, and October 10, 2006, respectively. On June 25, 2004, Velcro commenced this action against Paiho and a number of other defendants, accusing them of infringing the patents by "importing into the United States hook and loop fastener products made by a process embodied in the patented invention" and seeking injunctive relief and damages.[2] Compl. ¶ 14. Paiho has answered and counterclaimed for a declaratory judgment of non-infringement.

Discussion

I. Construction of "Extrusion"

Neither party asserts that the patents express an intent to impart a novel meaning to the term "extrusion" or that the term lacks clarity. Instead, each contends that the language of the

[2]Velcro has voluntarily dismissed all of the other defendants from the case without prejudice.

claims and other intrinsic evidence support its construction. Velcro interprets "extrusion" to mean simply "material exiting extruding equipment," while Paiho interprets it as "a form produced by an extruding process that holds a shape defined by the extruding die after exiting the extruding die."

To support its reading, Paiho points out that claims 7 and 22 of the '028 patent refer to the extrusion as "strip-like," while claim 7 also describes it as the product of "forming." Paiho further notes that both of these claims, as well as claim 1 of the '243 patent, use "extrusion" as the object of "directing" between the rollers or "between said forming roller and said pressure means," in the case of claim 22. Velcro, on the other hand, emphasizes that the claims uniformly refer to the extrusion as being "of molten plastic material" that "fills [the] hook-forming cavities" after its direction through the rollers or between the forming roller and the pressure means.

The court agrees with Velcro that "Paiho fails to explain how material that is 'molten' could 'hold a shape' for some unidentified period after exiting extruding equipment." Velcro Repl. at 3-4. Moreover, "a form . . . that holds a shape defined by the extruding die" could not "fill" the cavities on the forming roller as the claims describe. Yet an extrusion could be "strip-like," the product of "forming," and the object of

"directing" without having to maintain a shape imparted by the die. The adjective "strip-like" conveys a suggestion of configuration, rather than a defined shape; "forming" can denote mere creation, rather than casting in a defined shape; and an object need not have a defined shape to undergo "directing." The language of the claims therefore does not bear Paiho's narrow construction of "extrusion." To imbue the term "extrusion" with "the full breadth of [its] ordinary and customary meaning[]," NTP, 392 F.3d at 1345, the court must construe it as Velcro suggests, i.e., simply "material exiting extruding equipment."[3]

Having thus concluded that the definition of "extrusion" is clear from the language of the claims, the court peruses the remaining intrinsic evidence for the sole purpose of "determining if a deviation from the clear language of the claims is specified."[4] Interactive Gift, 256 F.3d at 1331. Paiho argues

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[3]Indeed, the court notes that this construction hardly differs from the one that Paiho specifically asserts is supported by the plain language of the claims: "a form produced by an extruder that can be directed between a forming roller and a pressure roller." Paiho Cl. Constr. Br. at 9, 13. Again, Paiho does not explain why an extrusion needs to hold its shape in order to be directed.

[4]The court also cannot use the dictionaries and technical treatises offered by Paiho to contradict the clear meaning of "extrusion" mandated by the claims. E.g., Vitronics, 90 F.3d at 1584 n.6. Because those sources provide definitions of the term that vary with each other and with Paiho's proposed interpretation, compare Paiho Cl. Constr. Br. at 8-9 with Velcro Reply at 2-3, the court does not consider the dictionaries and treatises instructive on the construction of "extrusion."

that the specification makes clear that the extrusion must hold its shape after passing through the die by indicating the preferred thickness and width of the extrusion. '028 patent, col. 9, lines 7-10. Paiho also characterizes the drawings in the patent as rendering the extrusion "as a form that is holding a shape defined by [the] extruder head . . . ." Paiho Cl. Constr. Br. at 10, 13. According to Paiho, this "disclosure teaches that the extrusion has an ascertainable shape and size." Id.

Specifying the dimensions of the extrusion, however, does not mean that it has a defined shape, for the same reason that describing it as "strip-like" throughout the claims does not require that interpretation. Furthermore, like the claims themselves, the specification repeatedly alludes to the extrusion as molten or as filling the cavities in the roller. See, e.g., '028 patent, col. 2, lines 60-61; col. 3, lines 21-24, 31-33, 42-48, 61-64; col. 5, lines 26-29; cols. 7, lines 60-68. The drawings also refer to "an enlarged 'bank' . . . formed just upstream of the interface" of the rollers (and downstream of the extruder head), the creation of which "assures the presence of an adequate supply of molten plastic material for complete filling of the hook-forming cavities." Id., col. 8, lines 9-17. Taken in their entirety, then, the written description and drawings are consistent with the language of the claims. See Innova/Pure Water, 381 F.3d at 1120-1122.

In any event, as Velcro points out, the specification attributes dimensions to the extrusion only in describing the "preferabl[e]" way of using polypropylene plastic material to run the process, id., col. 9, lines 7-10, and notes that nylon can also be used. Id., col. 8, lines 57-65. A preferred embodiment of the invention noted in the written description does not serve to restrict the meaning of a term in the claim.[5] See, e.g., Arlington Indus., Inc. v. Bridgeport Fittings, Inc., 345 F.3d 1318, 1327 (Fed. Cir. 2003); Altiris, Inc. v. Symantec Corp., 318 F.3d 1363, 1370 (Fed. Cir. 2003). Accordingly, even if the specification supported Paiho's reading of "extrusion" by giving its dimensions, it is clear that those dimensions describe only the preferred embodiment of the process and therefore do not limit the scope of "extrusion" as used in the claims. See SuperGuide Corp. v. DirecTV Enters., 358 F.3d 870, 875 (Fed. Cir. 2004) ("The written description . . . is not a substitute for, nor can it be used to rewrite, the chosen claim language.")

Finally, Paiho argues that the prosecution history of the '028 patent supports its construction, noting that it contains "no indication . . . that the term 'extrusion' does not mean a form produced by an extrusion process that holds a shape defined

[5] "Similarly, the mere fact that the patent drawings depict a particular embodiment of the patent does not operate to limit the claims to that specific configuration." Anchor Wall, 340 F.3d at 1306-1307.

by the extrusion die after exiting the extrusion die." Paiho Cl. Constr. Br. at 10. Because the claims themselves do not bear that interpretation, however, the fact that the prosecution history does not contradict it is irrelevant. See, e.g., Rexnord Corp. v. Laitram Corp., 274 F.3d 1336, 1342-43 (Fed. Cir. 2001) (describing consultation of prosecution history as "confirmatory measure" undertaken "to confirm that the patentee's use of the disputed terms is consistent with the meaning given to it [*sic*] by the court").

Paiho also suggests that an amendment to Fischer's application to the '028 patent "acknowledged the difference between" the "extrusion" described in the claims and "the direct injection of a plastic melt directly onto a molding drum." Paiho Cl. Constr. Br. at 11, 13-14. In the amendment, Fischer referenced an existing patent cited by the examiner and granted to one Rochlis, explaining that it called for "moldable material" to be applied directly to the "molding drum" through a nozzle and then "forced into the cavities by way of [a] belt and roller arrangement." Amendment rec'd Feb. 22, 1988, at 16-17. Fischer offered this explanation in response to the examiner's concern that the Rochlis patent and another existing invention could be combined to render Fischer's claims obvious. Id. at 16.

In Nystrom v. Trex Co., 374 F.3d 1105 (Fed. Cir. 2004), the Federal Circuit rejected an argument nearly identical to Paiho's.

The patentee had submitted an amendment in response to the examiner's contention, like that of the examiner of the '028 patent, that a combination of existing inventions would make the patentee's claims obvious. Id. at 1113. Based on the patentee's statement in the amendment that one of the existing patents was "clearly not concerned with materials made from wood," the defendant argued that the term "board" in the patent-in-suit should be construed to exclude "boards that were not made from wood cut from a log." Id. The Federal Circuit disagreed, reading the statement "not as a disavowal or disclaimer that [the patentee's] claimed invention is limited to wood decking boards, but as an argument against the examiner's obviousness rejection." Id. The court therefore held the statement "insufficient to restrict the scope of [the] claims." Id.

Like the Federal Circuit in Nystrom, this court declines to read Fischer's response to the examiner's concerns over obviousness to limit the scope of the term "extrusion" in the way Paiho suggests. The court concludes that neither the specification nor the prosecution history warrants a departure from the ordinary meaning of "extrusion" as used in the claims. Indeed, the meaning of term is clear from the language of the claims themselves.[6] Accordingly, the court construes "extrusion"

[6]The court therefore does not consider the extrinsic evidence submitted through the conflicting affidavits of the parties' expert witnesses. CCS Fitness, Inc. v. Brunswick Corp., 288 F.3d 1359, 1368 (Fed. Cir. 2002).

to mean "material exiting extruding equipment," rather than "a form produced by an extruding process that holds a shape defined by the extruding die after exiting the extruding die."

II. Construction of "Means for Providing Pressure"

The parties agree that the term "means for providing pressure" in claim 22 of the '028 patent must be analyzed as a means-plus-function claim, i.e., a claim "expressed as a means . . . for performing a specified function without the recital of structure, material, or acts in support thereof . . . ." 35 U.S.C. § 112, ¶ 6. To construe a claim expressed though a means-plus-function limitation, "the court must first identify the function of the limitation. The court next ascertains the corresponding structure in the written description that is necessary to perform that function." Altiris, 318 F.3d at 1375 (citation omitted); see also Versa Corp. v. Ag-Bag Int'l Ltd., 392 F.3d 1325, 1328 (Fed. Cir. 2004); Gemstar-TV Guide Int'l, Inc. v. Int'l Trade Comm'n, 383 F.3d 1352, 1361 (Fed. Cir. 2004).

The parties agree that the "means for providing pressure" serves the function of directing pressure toward the forming roller. They disagree, however, on what constitutes the corresponding structure necessary to perform that function. "A disclosed structure is corresponding 'only if the specification or the prosecution history clearly links or associates that

structure to the function recited in the claim.'" Omega Eng'g, Inc. v. Raytek Corp., 334 F.3d 1314, 1321 (Fed. Cir. 2003) (quoting B. Braun Med., Inc. v. Abbott Labs., 124 F.3d 1419, 1424 (Fed. Cir. 1997)); see also, e.g., Golight, Inc. v. Wal-Mart Stores, Inc., 355 F.3d 1327, 1334 (Fed. Cir. 2004). The Federal Circuit recently explained the rationale behind this test:

> The duty of a patentee to clearly link or associate structure with the claimed function is the quid pro quo for allowing the patentee to express the claim in terms of function . . . . The price that must be paid for use of that convenience is limitation of the claim to the means specified in the written description and equivalents thereof. If the specification is not clear as to the structure that the patentee intends to correspond to the claimed function, then the patentee has not paid that price but is rather attempting to claim in functional terms unbounded by any reference to structure in the specification. Such is impermissible under the statute.

Med. Instrumentation & Diagnostics Corp. v. Elekta AB, 344 F.3d 1205, 1211 (Fed. Cir. 2003) (internal quotation marks, citation, and bracketing omitted), cert. denied, 124 S. Ct. 1715 (2004).

The parties agree that the second roller discussed throughout the specification comprises one of the structures corresponding to the function of directing pressure toward the forming roller. They dispute, however, whether the references to the Menzin invention in the '028 patent and its prosecution history clearly link or associate an alternative structure, an extruder and die apparatus, with that function.

In discussing Menzin, the "Background" section of the '028

patent states that "[a] plastic extruder is provided in close association with the drum so that as the drum rotates, plastic is injected into the hook-shaped cavities and is joined to a backing strip." '028 patent, col. 2, lines 1-4. Velcro argues that this language qualifies the extruder as a corresponding structure because "the placement of a plastic extruder and die in 'close association' to a forming roller would create sufficient pressure so as to fill the hook-shaped cavities of the forming roller with the extrusion."[7] Velcro Cl. Constr. Br. at 14-15.

At the outset, Paiho rejoins that the reference to Menzin's extruder "does not explicitly indicate that the generally described structure can accomplish the function of providing pressure toward the forming roller." Paiho Cl. Constr. Br. at 16. But Paiho fails to provide any authority for the proposition that the specification must "explicitly indicate" that the

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[7]Velcro also relies on an "information disclosure statement" submitted with Fischer's application for the patent which describes Menzin's invention as "[a] mold wheel . . . which includes cavities about its periphery . . . . Plastic material is forced under pressure into the cavities . . . ." Info. Disclosure Statement, rec'd May 29, 1984, at 2, 4. Because this piece of the prosecution history does not even mention an extruder, whether as the source of the pressure or otherwise, it could not possibly link or associate that structure with the claimed function. See Med. Instrumentation, 344 F.3d at 1219 (refusing to treat prosecution history's reference to existing patent's use of digital-to-digital conversion as linking software for that purpose to claimed function where history made no reference to software as such).

disclosed structure performs the claimed function. In fact, relying on guidelines promulgated by the Patent and Trademark Office, the Federal Circuit has stated that "'[t]he written description does not have to explicitly describe the structure corresponding to a means-plus-function limitation . . . .'" Atmel Corp. v. Info. Storage Devices, Inc., 198 F.3d 1374, 1380 (Fed. Cir. 1999) (quoting 64 Fed. Reg. 41392, 41393 (July 30, 1999)) (parentheticals omitted).[8] The appropriate standard, as Paiho itself recognizes, is instead "whether one skilled in the art would perceive a clear link or association between the structures and the recited function."[9] Paiho Cl. Constr. Br. at 15 (citing Atmel, 198 F.3d at 1382); accord Med. Instrumentation, 344 F.3d at 1212.

The court agrees with Velcro that the Menzin reference passes this test. Again, the parties are in accord that the

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[8]These proposed guidelines have since been published in final form without relevant changes. 65 Fed. Reg. 38510 (June 21, 2000).

[9]As commentators have noted, the standard for determining whether a corresponding structure has been adequately identified remains "somewhat uncertain" because the Federal Circuit has articulated it in varying ways. 1 R. Carl Moy, Moy's Walker on Patents § 4:52 (4th ed. 2003); see also Yoncha L. Kundupoglu, The Law of Means-Plus-Function Language, 28 AIPLA Q. J. 39, 79 (2000) ("anomalies in cases grappling with means-plus-function limitations have done little to promote uniform and predictable claim interpretation"). Because the parties here agree on the appropriate standard, the court need not attempt to untangle possibly conflicting Federal Circuit precedent on this issue.

function of the claimed "means for providing pressure" should be identified as directing pressure toward the forming roller. In its discussion of Menzin's invention, the '028 patent states that the "extruder is provided in close association with the drum so that as the drum rotates, plastic is injected into the hook-shaped cavities and is joined to a backing strip." '028 patent, col. 2, lines 1-4 (emphases added). This passage indicates, through its use of the phrase "so that," that it is the "close association" of the extruder and the forming roller which results in the injection of the plastic into the cavities. The extruder therefore serves to direct pressure toward the forming roller or, in other words, as "the means for providing pressure."

Paiho contends that "means for providing pressure" cannot encompass an extruder "because the claim language . . . states that the strip-like extrusion of molten plastic material is directed in between the forming roller and the pressure means and neither the specification nor Menzin describe [*sic*] a structure by which injection of material from an extruder can be used to provide pressure in such a way." Paiho Cl. Constr. Br. at 17. As explained at the Markman hearing, this theory appears to proceed from the fact that the internal mechanism of the extruder no longer exerts any pressure on the extrusion subsequent to its passage through the die. Paiho ignores, however, that in describing Menzin the '028 patent identifies the "close

association" of the extruder and the drum, not the internal mechanism of the extruder, as the source of the pressure. This arrangement, in layman's terms, gives the extrusion nowhere else to go but into the cavities after it comes out of the die. The extruder therefore performs the function of "directing a strip-like extrusion of molten plastic material in between [the] forming roller and [the] pressure means such that said plastic material fills [the] hook-forming cavities" as described in claim 22. '028 patent, col. 14, lines 34-37.

Paiho also argues that even if "one skilled in the art would clearly perceive a link or association" between Menzin's extruder and the function of the "means for providing pressure," the extruder cannot constitute a corresponding structure because the '028 patent refers to Menzin only in teaching away from it.[10] Paiho Cl. Constr. Br. at 18. As Velcro points out, however, "[i]t is well established that prior art references can serve as elements in a patent claim," even where those references teach away from the prior art. Storer v. Hayes Microcomputer Prods., Inc., 995 F. Supp. 185, 189 (D. Mass. 1998) (citing Intel Corp.

[10]Relatedly, Paiho argues that "means for providing pressure" cannot correspond to "direct injection apparatus" because Fischer "disavowed" this method in the amendment submitted on February 17, 1988. Paiho Cl. Constr. Br. at 18. The court has already addressed this argument in concluding that the amendment's reference to Rochlis did not support Paiho's narrow reading of "extrusion." See Part I, supra.

v. Int'l Trade Comm'n, 946 F.2d 821, 842 (Fed. Cir. 1991)); see also Clearstream Wastewater Sys., Inc. v. Hydro-Action, Inc., 206 F.3d 1440, 1445 (Fed. Cir. 2000). In Clearstream, the Federal Circuit rejected the argument that a prior art structure disclosed in a patent could not qualify as a corresponding structure merely because the patent discussed the disadvantages of the prior art structure and revealed inventive features intended to overcome those problems. 206 F.3d at 1444. The court held that such a rule could apply only if the patent described the prior art as "incapable" of performing the function or when "the means-plus-function element was the only new element in the claim for a non-novel combination." Id. at 1446.

Here, the '028 patent in no way suggests that an extruder and die apparatus cannot serve to direct pressure toward the forming roller and, clearly, the "means for providing pressure" does not constitute the only novel element of claim 22. Indeed, Paiho does not make any such argument or otherwise attempt to distinguish Clearstream. This court therefore considers the case controlling. See also Micro Chem., Inc. v. Great Plains Chem. Co., 194 F.3d 1250, 1260 (Fed. Cir. 1999) (holding that method noted in background section of patent-in-suit as "less effective than the preferred embodiment in accomplishing the claimed function" was corresponding method for purpose of step-plus-function analysis where "method itself was never disavowed as

being incapable of that function"). An extruder and die apparatus qualifies as a corresponding structure to the "means for providing pressure" claimed in the '028 patent.[11]

Conclusion

For the foregoing reasons, the court construes the term "extrusion" in the patents-in-suit as "material exiting extruding equipment" and the term "means for providing pressure" to include an extruder and die apparatus.

SO ORDERED.

Joseph A. DiClerico, Jr.
United States District Judge

March 2, 2005

cc: John L. DuPre, Esquire
Colin C. Durham, Esquire
Edward A. Haffer, Esquire
Gregory A. Madera, Esquire
N. Scott Pierce, Esquire
Mark C. Rouvalis, Esquire
Craig R. Smith, Esquire
Jeremy T. Walker, Esquire

[11]In making this determination, the court does not rely on the parties' conflicting expert affidavits. See note 6, supra.