United States Court of Appeals for the Federal Circuit

00-1300, -1314, -1315

UNIQUE COUPONS, INC.,

Plaintiff-Cross Appellant,

v.

NORTHFIELD CORPORATION,

Defendant-Appellant,

and

MENASHA CORPORATION,

Defendant-Appellant.

DECIDED: June 13, 2001

Before NEWMAN, LOURIE, and BRYSON, Circuit Judges.

LOURIE, Circuit Judge.

DECISION

Northfield Corporation and Menasha Corporation appeal from the judgment of the United States District Court for the Northern District of Illinois holding that they infringed claim 1 of U.S. Patent 5,079,901 and claim 20 of U.S. Patent 5,588,280 under the doctrine of equivalents. Unique Coupons, Inc. v. Menasha Corp., No. 96-C-7532, 1999 U.S. Dist. LEXIS 21744 (N.D. Ill. Sept. 2, 1999) ("Unique II"). Unique Coupons, Inc. cross-appeals from the district court's damages award, its denial of Unique's motion to find willful infringement, and its modification of the permanent injunction to allow Northfield and Menasha to continue to use and resell their existing devices. Because the district court erred in its construction of the claims of the '901 and '280 patents, and Northfield does not infringe those patents as a matter of law, we reverse.

BACKGROUND

Unique is the exclusive licensee of the '901 and '280 patents, which relate to devices used to insert coupons from a continuous coupon web into packages such as cereal cartons. Agreement of Jan. 1, 1991. The assignee of the patents, Carol Witt, is the sole owner of Unique. Unique II at *5. Ms. Witt entered into a patent license agreement with Unique, which granted Unique "the sole, exclusive and worldwide right and license to use the Patents and Technical Information to make, have made, use, develop, commercialize, market and sell Licensed Products." Agreement of Jan. 1, 1991, § 2.1. The agreement also gave Unique the right to sue infringers, sublicense, and assign the patents, the latter two rights being subject to Witt's approval. Id. at §§ 2.2, 6.1, 8. Unique paid Witt a paid-up license fee of $27,381.74 for five years under a license agreement of May 1, 1990, which was acknowledged in the subsequent January 1, 1991 agreement as the same license fee for that later agreement. Id. at § 5.1. Unique also paid Witt royalties until the 1991 agreement was amended to be royalty-free on January 1, 1992.

Northfield manufactures the Northfield Model 1600 ("Model 1600"). Unique II at *11. Menasha markets and distributes the Model 1600 for rental and sale. Id. at *30.

Two patent claims are at issue on appeal and read as follows:

> 1. A method for positioning coupons, one at a time, at a predetermined location at a predetermined time, each of said coupons having a leading edge and a trailing edge, said coupons being provided as a stream of coupons in a continuous web with a forwardmost coupon having its trailing edge connected to the leading edge of the next coupon in said continuous web by a weakened web portion extending transversely of said web, and each successive coupon being similarly connected in said web, said method comprising the steps of:
>
> providing a timing signal related to said predetermined time at which said forwardmost coupon is to be positioned at said predetermined location;

sensing the presence of and the absence of a coupon at a sensing position along a coupon path relative to said predetermined location;

advancing said continuous web along said coupon path toward said predetermined location in response to said timing signal and sensing the presence of said forwardmost coupon at said sensing position;

bursting said forwardmost coupon from the next coupon in said continuous web along said weakened web portion while at least a portion of said forwardmost coupon is at said coupon sensing position;

moving said forwardmost coupon toward said predetermined location at a predetermined speed, whereby said forwardmost coupon is positioned relative to said predetermined location at said predetermined time; and

arresting travel of said continuous web upon the sequential sensing of the absence of said forwardmost coupon and then the presence of the next succeeding coupon at said sensing position.

'901 patent, col. 13, l. 40 to col. 14, l. 6 (emphasis added).

20. A method of delivering coupons, one at a time, to moving containers as the containers move past a predetermined point of insertion, the coupons being provided in a continuous web wherein a trailing edge of a forwardmost coupon is detachably connected to a leading edge of a successive coupon by a weakened separable portion therebetween and wherein each coupon after the successive coupon is similarly connected in the web, the method thereby manufacturing containers having coupons therein and comprising the steps of:

sensing the movement of the containers relative to the predetermined point of insertion and generating a timing signal based upon the movement of the containers, the timing signal pertaining to when one of the containers will be at the predetermined point of insertion;

sensing the presence and absence of the forwardmost coupon at a sensing position and generating a sensing signal pertaining thereto;

providing a coupon separation and delivery subassembly between the continuous web of coupons and the predetermined point of insertion, the subassembly including feed rolls and positioning rolls, the positioning rolls disposed downstream of the feed rolls;

advancing the continuous web of coupons utilizing the feed rolls;

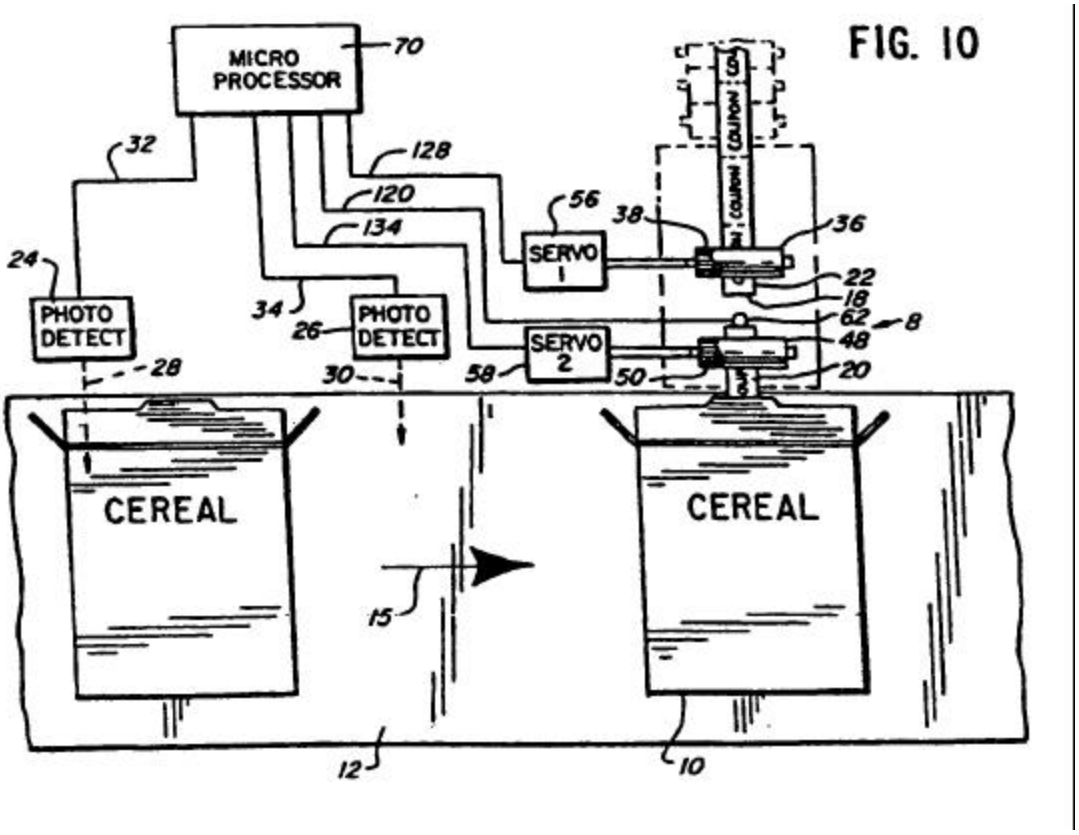
providing a first output signal based in part upon the timing signal and the sensing

signal; and

separating the forwardmost coupon from the successive coupon in response to the first output signal and delivering the forwardmost coupon to one of the moving containers as said container moves past the predetermined point of insertion.

'280 patent, col. 17, l. 10 to col. 18, l. 20 (emphasis added).

Figure 10 of the '901 and '280 patents illustrates the claimed invention and is reproduced below:



In the abstract, summary of the invention, and detailed description of the preferred embodiments, the patents specify that the position of the coupon sensor **62** is between the positioning rolls **48** and **50** and the feed rolls **36** and **38**. '901 patent, abstract; col. 3, ll. 25-28; col. 5, ll. 48-52; col. 6; ll. 6-9; col. 7; ll. 27-30; col. 11, ll. 56-58. '280 patent, abstract; col. 3, ll. 27-29; col 5, ll. 46-49; col. 6, ll. 4-6; col. 7, ll. 21-24; col. 11, ll. 35-37. In a preferred embodiment, photoelectric container sensors **24** and **26** are positioned to generate a timing signal so that the signal processor **70** can calculate the line speed of each container and the

time at which the container will reach the location of coupon insertion. '901 patent, col. 10, ll. 18-37. At that time, the signal processor commands the feed rolls **36** and **38** to accelerate, thereby moving the forwardmost coupon **20** of the coupon web to the positioning rolls **48** and **50**. Id. at col. 10, ll. 37-41. The positioning rolls **48** and **50**, which operate at a greater rotational speed than the feed rolls **36** and **38**, form a bight that receives the leading edge of the forwardmost coupon **20**. Id. at col. 11, ll. 34-44. The tensile force created by the two sets of rolls operating at different speeds then severs or "bursts" the coupons at a perforated line. Id. at col. 11, ll. 45-47. The coupon inserting head **8** then injects the coupons into the containers. Id. at col. 10, ll. 42-45.

Northfield asserts that its Model 1600 is covered by its own U.S. Patent 5,845,462, which describes a similar coupon-inserting device. According to the written description of that patent and the testimony at trial, the Model 1600 has a "deactivation" or coupon sensor located downstream of both the feed rolls and the "delivery" rolls. '462 patent, col. 6, ll. 28-30. The device also has an activation sensor that sends a signal to begin rotation of feed rollers when it senses an approaching container. Id. at col. 2, ll. 52-55. When the deactivation or coupon sensor senses the presence of the leading edge of a forwardmost coupon, it signals the feed rollers to stop rotating. Id. at col. 5, ll. 14-25. The "delivery" or positioning rollers, however, keep rotating, creating a tensile force between the two sets of rollers that causes the separation of the coupons at a perforation line. Id.

Unique sued Northfield and Menasha (collectively "Northfield") for infringement of several claims of the '901 and '280 patents. The district court construed claim 1 of the '901 patent in light of the specification as not requiring that the coupon sensor be located between the positioning rolls and the feed rolls. Unique Coupons, Inc., v. Menasha Corp., No. 96-C-7532, 1998 U.S. Dist. LEXIS 15921, at *22 (N.D. Ill. Sept. 30, 1988) ("Unique I"). The district court denied Unique's motion for summary judgment of infringement of claim 1 of the '901 patent because it found a genuine issue of material fact as to whether the Model 1600 sequentially sensed the absence of the front coupon within the meaning of step six of claim 1, "arresting travel of said continuous web upon the sequential sensing of the absence of said forwardmost coupon and then the presence of the next succeeding coupon at said sensing position." Id. at *23. The district court also construed claim 20 of the '280 patent as not requiring that the feed rolls stop rotating after the front coupon is separated. Id. at *25-26. The district court found a genuine issue of material fact as to whether the Model 1600 responded to a "first output signal based in part upon the timing signal [from the container sensor] and a sensing signal [from the coupon sensor]" as required by claim 20 of the '280 patent. Id. at *27.

Unique then narrowed its assertions of infringement to claim 1 of the '901 patent and claim 20 of the '280 patent. Following a bench trial, the district court determined that the Model 1600 did not literally infringe claim 1 of the '901 patent because it arrested travel of the continuous coupon web immediately upon the sensing of the presence of the front coupon, not upon the "sequential sensing" of both the absence of the forwardmost coupon and then the presence of the next coupon, as required by that claim. Unique II at *20. Nevertheless, the district court found that the Model 1600 infringed under the doctrine of equivalents because the court considered that the use of a sensor which senses the presence or absence of that coupon, as opposed to the presence and then absence of a coupon, was an insubstantial difference. Id. at *26. The court also determined that Northfield met the "timing signal" limitation under the doctrine of equivalents. Although the Model 1600 did not have a "timing signal" per se, it had an activation sensor for sensing the presence of a container at a predetermined location. Id. at *25. The district court found that the sensing device in the Model 1600 was the functional

equivalent of the claimed timing signal, and that the distinction between the accused sensing function and the claimed function was insubstantial. Id.

Similarly, the district court found that the Model 1600 did not literally infringe claim 20 of the '280 patent because the Model 1600 had no first output signal that was a combination of a timing signal and a sensing signal, as that claim required. Id. at *20-21. However, the district court found infringement of that claim under the doctrine of equivalents because Model 1600's dual "start" and "stop" signals functioned in the same way as the claimed "first output signal." Id. at *27-28.

The district court declined to find that the infringement was willful because it found that Northfield had reasonably relied upon competent noninfringement opinions of counsel and that Northfield had mounted a good faith and substantial challenge to the infringement charges. Id. at *34-35. The district court awarded Unique damages based on a reasonable royalty derived from the license that Witt had granted to Unique for $27,000 and a royalty rate of eight percent of Northfield's gross sales of the Model 1600. Id. at *44-45. The district court subsequently amended its judgment to allow use and/or resale of the specific coupon inserters upon which the award of royalty damages was based. Unique Coupons, Inc. v. Menasha Corp., No. 96-C-7532 (N.D. Ill. Feb. 17, 2000) (order amending judgment of Dec. 9, 1999).

Northfield timely appealed; we have jurisdiction pursuant to 28 U.S.C. § 1295(a)(1) (1994).

DISCUSSION

A. Standing

We first address the jurisdictional question whether Unique, as the exclusive licensee, has standing to bring this infringement action without joining the patentee, Witt. The parties did not raise the issue of Unique's standing on appeal, but we must address this question because it is jurisdictional. See Mentor H/S, Inc. v. Med. Device Alliance, Inc., 240 F.3d 1016, 1018, 57 USPQ2d 1819, 1821 (Fed. Cir. 2001). Unique's standing depends on whether Unique has received all substantial rights under the patent such that it is a virtual assignee within the meaning of Vaupel Textilmaschinen v. Meccanica Euro Italia, 944 F.2d 870, 875-76, 20 USPQ2d 1045, 1049 (Fed. Cir. 1991). Witt broadly granted Unique exclusive rights to the patented technology, including the right to sue infringers, but any sublicenses or an assignment required her approval. Agreement of Jan. 1, 1991, §§ 2.2, 6.1, 8. In Vaupel, we held that a sublicensing veto was a minor derogation from the grant of rights that did not substantially interfere with the full use by Vaupel of the exclusive rights under the patent. Vaupel at 875, 20 USPQ2d at 1049. A limitation on assignment, however, was one of many factors that precluded the exclusive licensee from suing on its own in Abbott Laboratories v. Diamedix Corp., 47 F.3d 1128, 1132-33, 33 USPQ2d 1771, 1774-75 (Fed. Cir. 1995). We do not consider that factor as overriding the "particularly dispositive" Vaupel factor that Unique was granted the right to sue on its own, a right that was not fully conveyed in the license agreement in Abbott. See id. We conclude in this case that Witt granted Unique all substantial rights in the patent and that Witt's joinder in the infringement action was unnecessary. "The policy underlying the requirement to join the owner when an exclusive licensee brings suit is to prevent the possibility of two suits on the same patent against a single infringer." Id. Witt, as the sole owner of Unique, is unlikely to have an interest in the litigation separate from Unique's or bring a second suit on the same patents. Moreover, Northfield apparently did not fear duplicative litigation because it did not raise the issue of Unique's standing at trial or on appeal.

Because Unique has received all substantial rights under the patent and Northfield is not prejudiced by Unique bringing this suit without joining the patent owner, we conclude that jurisdiction exists and proceed to the merits of the case.

We review the district court's claim construction, a legal question, de novo. WMS Gaming, Inc. v. Int'l Game Tech., 184 F.3d 1339, 1346, 51 USPQ2d 1385, 1389 (Fed. Cir. 1999). Whether a claim encompasses an accused device, either literally or under the doctrine of equivalents, is an issue of fact that, following a bench trial, we review for clear error. Id.

B. The Claims

1. Claim Construction

Northfield argues that, when read in light of the specification and the prosecution history, claim 1 of the '901 patent requires that the coupon sensor must be located between the positioning rolls and the feeding rolls. Unique responds that this court should decline to limit the claims to a preferred embodiment in the disclosure.

We agree with Northfield that claim 1 of the '901 patent and claim 20 of the '280 patent, while not explicitly identifying the position of the coupon sensor, must be understood to have the sensor between the feed rolls and the positioning rolls. Claim 1 of the '901 patent states that the sensor is at a sensing position "along a coupon path" relative to the predetermined location at which the coupon will be positioned for insertion into a container. '901 patent, col. 13, ll. 53-54. Claim 20 of the '280 patent refers to the sensing position of the coupon sensor, which generates a sensing signal upon sensing the presence and absence of the forwardmost coupon, and then, in combination with a timing signal creates a first output signal that causes the bursting of the coupons. '280 patent, col. 18, ll. 4-18. The abstract, summary of the invention, and detailed description of both patents require that the coupon sensor be in a particular position: between the feed rolls and the positioning rolls. '901 patent, abstract; col. 3, ll. 25-28; col. 5, ll. 48-52; col. 6; ll. 6-9; col. 7; ll. 27-30; col. 11, ll. 56-58. '280 patent, abstract; col. 3, ll. 27-29; col 5, ll. 46-49; col. 6, ll. 4-6; col. 7, ll. 21-24; col. 11, ll. 35-37. Throughout the written description, the sensing position is defined only at this location. This location is not merely a preferred embodiment, as Unique asserts. Rather, this location is the only embodiment disclosed in the summary of the invention and throughout the disclosure. This sensing position appears to be necessary to the proper operation of the invention because the claimed device is orchestrated to receive a message from the sensor only when the presence and absence of the forwardmost coupon is detected between the feed rolls and the positioning rolls. See, e.g., '901 patent, col. 13, ll. 53-55; '280 patent, col. 18, ll. 3-5. Northfield asserts that, if the coupon sensor position were beyond the positioning rolls, then the claimed device would not function properly. At least two coupons would be burst with each activation because the sensor would detect the next succeeding coupon only after it had already been burst from the web. We cannot interpret claim terms in a vacuum; resort to the specification is necessary in this case to determine what the patentee meant by the coupon sensing position. Although there is a fine line between interpreting claim language in light of the specification and reading a limitation from the specification into the claim, Comark Communications, Inc. v. Harris Corp., 156 F.3d 1182, 1186-87, 48 USPQ2d 1001, 1005 (Fed. Cir. 1998), we do not improperly cross that line when we interpret "sensing position" consistently with the clear guidance in the specification as to that term.

In SciMed Life Systems, Inc. v. Advanced Cardiovascular Systems, Inc., 242 F.3d 1337, 58

USPQ2d 1059 (Fed. Cir. 2001), we affirmed the district court's narrow claim construction because the abstract limited the patents to particular lumen catheters, the patents distinguished the prior art on the basis of such catheters, and the "Summary of the Invention" portion of the written description characterized the invention as having that type of catheter. Id. at 1343, 58 USPQ2d at 1064. Similarly, in this case, in every statement in the written description referring to the coupon sensing position, the patentee emphasized that it is located between the feed rolls and the positioning rolls, and this location appears to be necessary for the proper timing sequence of positioning the coupons into containers. In Wang Laboratories, Inc. v. America Online, Inc., 197 F.3d 1377, 53 USPQ2d 1161 (Fed. Cir. 1999), we determined that the claim term "frame" was necessarily limited to a character-based protocol because that was the only embodiment that was described and enabled in the specification. Id. at 1382, 53 USPQ2d at 1165. We sought in that case, and in this one, to interpret the claims to preserve, rather than defeat, their validity. Id. at 1383, 53 USPQ2d at 1165. The only coupon sensing position described and enabled in the '901 and '280 patents is between the feed rolls and positioning rolls. Finally, we are not persuaded by Unique's claim differentiation arguments that the coupon sensor cannot be limited to a particular location in claim 1 of the '901 patent or claim 20 of the '280 patent because other claims in those patents explicitly limit the sensor location. The doctrine of claim differentiation does not broaden claim terms beyond their correct scope, determined in light of the intrinsic evidence and any relevant extrinsic evidence. Id. at 1384, 53 USPQ2d at 1166. We therefore interpret the coupon sensing position in the claims as being between the feed rolls and the positioning rolls.

Having construed the position of the coupon sensor in light of the specification, and in view of our discussion on infringement, infra, we do not reach Northfield's arguments about other asserted claim limitations and the prosecution history of the '280 patent.

C. Infringement

Northfield argues that the Model 1600 does not infringe either patent because its coupon sensing position is downstream of the positioning rolls, rather than between the feed rolls and positioning rolls as required by the claims at issue. Unique responds that the Model 1600 infringes because its coupon sensor is located between the feed rolls and the furthest set of positioning rolls.

We agree with Northfield that the Model 1600 does not have a coupon sensor at a position between the feed rolls and the positioning rolls and that it therefore does not literally infringe the claims. The "delivery" rolls in the Model 1600 are analogous to the positioning rolls in the '901 and '280 patents because both types of rolls rotate faster than the feed rolls, thereby creating a tensile force to cause the bursting of the coupons at a perforation. '462 patent, col. 5, ll. 17-26; '901 patent, col. 3, ll. 13-18. We have construed the '901 and '280 claims as requiring that the coupon sensor be located between the feed rolls and the positioning rolls. In contrast, the Model 1600 senses the location of the forwardmost coupon at a position downstream of the positioning rolls. Although the Model 1600 has "dispensing" rolls downstream of the coupon sensor, '462 patent at col. 5, ll. 58, these are not analogous to the positioning rolls because they do not contribute to the bursting function.

We also agree with Northfield that the Model 1600 does not infringe under the doctrine of equivalents because the coupon sensing position of the accused device is substantially different from that of the claimed invention. Northfield introduced testimony that the claimed invention would not function properly if it had the coupon sensor located downstream of the positioning rolls because it would deliver two coupons to a container instead of one. Similarly,

Northfield introduced testimony that the Model 1600 would not function properly if the coupon sensor were in the claimed position between the feed and positioning rolls. Upon the first activation of the Model 1600, no coupon would be burst because the feed rollers would stop rotating immediately upon sensing the position. Upon the second activation, a continuous stream of coupons would be delivered to the container because the sensor would not detect the edge of a new coupon. Different coupon sensing positions therefore yield substantially different results. Noninfringement under the doctrine of equivalents, although a factual issue, may be determined as a matter of law when no reasonable fact-finder could determine other than that the substitute element plays a role substantially different from the claim limitation, as it does here. Stryker Corp. v. Davol, Inc., 234 F.3d 1252, 1257, 57 USPQ2d 1133, 1137 (Fed. Cir. 2000) (quoting Warner-Jenkinson Co., Inc. v. Hilton Davis Chem. Co., 520 U.S. 17, 40, 41 USPQ2d 1865, 1875 (1997)).

Northfield moved for summary judgment that the Model 1600 does not infringe claim 1 of the '901 patent and claim 20 of the '280 patent on the basis of the coupon sensing position, Unique I at *21-22, 26 n.6, and Unique has not presented evidence creating a genuine issue of material fact as to this issue. Because no reasonable fact-finder could find in favor of Unique on infringement, see Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 248 (1986), we conclude as a matter of law that the Model 1600 does not infringe the '901 or '280 patents, either literally or under the doctrine of equivalents.

It also appears that the district court ignored other specific claim limitations in the '901 and '280 patents in arriving at its conclusion of infringement under the doctrine of equivalents. For example, in claim 1 of the '901 patent, the coupon web must be arrested "upon the sequential sensing of the absence of said forwardmost coupon and then the presence of the next succeeding coupon at [the] sensing position." '901 patent, col. 14, ll. 3-7. The Model 1600, as the district court recognized, does not perform the claimed sequential sensing operation. Similarly, the '280 patent requires a first output signal that is a combination of a timing signal and a sensing signal. '280 patent, col. 18, ll. 14-15. The Model 1600 has no such output signal based on a combination of a timing signal and a sensing signal. Those facts found by the district court undercut its conclusion of infringement and constitute another reason why the district court's judgment must be reversed. The doctrine of equivalents cannot be employed in a manner that wholly vitiates claim limitations. Warner-Jenkinson Co. v. Hilton Davis Chem. Co., 520 U.S. 17, 29-30 (1997).

Having reversed the district court's finding of infringement under the doctrine of equivalents, the cross-appeals regarding willfulness, damages, and the injunction are moot.

CONCLUSION

Because the district court erred in its interpretation of the coupon sensor position in the claims, and the Model 1600 does not infringe as a matter of law either literally or under the doctrine of equivalents under a proper interpretation of the claims, we reverse.