

# United States Court of Appeals for the Federal Circuit

03-1089

PSC COMPUTER PRODUCTS, INC.,

Plaintiff-Appellant,

v.

FOXCONN INTERNATIONAL, INC.  
and HON HAI PRECISION INDUSTRY CO., LTD.,

Defendants-Appellees.

Paul Adams, Peacock, Myers & Adams, P.C., of Albuquerque, New Mexico, argued for plaintiff-appellant.

David E. Reynolds, Lewis Brisbois Bisgaard & Smith LLP, of Los Angeles, California, argued for defendants-appellees. With him on the brief was Kenneth D. Watnick.

Appealed from: United States District Court for the Central District of California

Judge Dean D. Pregerson

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DECIDED: January 20, 2004

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Before MAYER, Chief Judge, CLEVENGER and GAJARSA, Circuit Judges.

GAJARSA, Circuit Judge.

PSC Computer Products, Inc. (“PSC”) appeals the final judgment of the United States District Court for the Central District of California granting Foxconn International, Inc. and Hon Hai Precision Industry Co. Ltd. (collectively “Foxconn”) summary judgment of non-infringement of U.S. Patent No. 6,061,239 (the “‘239 patent”). PSC Computer Prods., Inc. v. Foxconn Int’l, No. 01-CV-6414. Because PSC dedicated plastic clips to the public by explicitly claiming only clips made of metal while specifically disclosing that the prior art included clips made of plastic, we affirm.

## BACKGROUND

The United States Patent and Trademark Office (“PTO”) issued the ‘239 patent for a “Cam-Type Retainer Clip for Heat Sinks for Electronic Integrated Circuits.” The ‘239 patent was assigned to PSC. The ‘239 patent covers a small but significant component of a complex technology product—the microchip. Like many electronic components, an operating microchip generates heat. A microchip generates heat as electrons flow through the “logic gates” that enable it to compute the desired outputs from its given inputs. An operating microchip generates heat proportional to the number of logic gates on that chip. Because modern chips generate enough heat to risk becoming self-destructive, system designers need to include heat sinks to dissipate the heat. This heat dissipation extends the useful life of both the microchip and adjacent heat sensitive components.

The ‘239 patent describes an invention for securing a heat sink to a chip using a cam-type retainer clip. Claim 1 of the ‘239 patent claims:

In a heat sink assembly providing cooling to an electronic semiconductor device wherein the device is mounted in a module, the module having means for engagement with a retainer clip, and the heat sink having a generally flat bottom surface and heat conducting engagement with the semiconductor device upper surface and a plurality of fins on the upper surface defining at least one channel, the improvement comprising a heat sink retainer clip including:

an elongated, resilient metal strap received in one of the channels of the heat sink having holding means at each end engaging the engagement means on the module, the center portion of the strap spaced a pre-determined distance above the upper surface of the heat sink base when the strap is not in tension; and

a cam-type latch pivotally mounted in the center portion of the strap and including a cam with a bearing surface, the distance from the pivot access to the bearing surface of the cam being greater than the distance between the pivot access and the upper surface of the base of the heat sink when said strap is not in tension, and an arm fixedly mounted to said cam, said arm, when rotated, causing said bearing surface of said cam to be forced against the surface of the base of the heat sink placing the strap in tension so as to force the heat sink into heat conducting engagement with the module.

‘239 patent, col. 6, ll. 6-31 (emphasis added).

The strap and the latch are the only two parts of a cam-type retainer clip for a heat sink assembly, as implied by Claim 1. One way that vendors can differentiate their products is by manufacturing these clip parts out of different materials. The choice of materials for the retainer clip lies at the heart of this dispute. PSC and Foxconn sell competing cam-type retainer clips for heat sink assemblies. PSC’s clip

is made of metal, while Foxconn's clip is made of plastic. PSC filed suit in the United States District Court for the Central District of California alleging that Foxconn's clip infringed the '239 patent. PSC conceded that Foxconn's clip did not literally infringe the '239 patent because Claim 1 covers clips containing "an elongated, resilient metal strap," and Foxconn's clip was made of plastic, but maintained nonetheless that Foxconn's plastic clip infringes the '239 patent under the doctrine of equivalents. Foxconn, in turn, argued that PSC had dedicated clips with plastic parts to the public, and moved for summary judgment of non-infringement on that ground.

The district court reviewed the '239 patent's claims and written description, and agreed with Foxconn that PSC had dedicated plastic clips to the public. In granting summary judgment to Foxconn, the district court relied on our recent decision in Johnson & Johnston Associates v. R.E. Service Co., 285 F.3d 1046 (Fed. Cir. 2002) (en banc), where we held that a patent applicant who discloses but does not claim subject matter has dedicated that matter to the public and cannot reclaim the disclosed matter under the doctrine of equivalents. Id. We had previously outlined this rule in Maxwell v. J. Baker, Inc., 86 F.3d 1098 (Fed. Cir. 1996), where we similarly held that a patent that disclosed subject matter in its written description without claiming it dedicated that subject matter to the public, and that use of the dedicated matter did not infringe the patent. The district court here determined that because the written description of the '239 patent disclosed clips made of plastic parts without claiming plastic, it had dedicated plastic clips to the public. Foxconn, therefore, could not infringe the '239 patent by equivalents because its plastic clips used materials in the public domain.

In reaching that conclusion, the district court noted the specific language in the written description stating that: "[t]he elongated strap [] is made of a resilient metal such as stainless steel although other resilient materials may be suitable for the strap," '239 patent, col. 4, ll. 49-51 (emphasis added), and that "[o]ther prior art devices use molded plastic and/or metal parts that must be cast or forged which again are more expensive metal forming operations." Id., col. 2, ll. 39-41 (emphasis added).

According to the district court, these passages demonstrate that, at the time that the inventor

applied for the '239 patent, he knew that other materials, including plastic, could be used to make “parts” of his invention, and that the inventor asserted the metal design of the '239 patent as an improvement over the prior art. The '239 patent, however, does not claim plastic parts, but instead includes an explicit “metal” limitation. The district court applied Johnson to conclude that the disclosure of unclaimed materials in the '239 patent's written description dedicated those materials to the public. This dedication prevented PSC from using the doctrine of equivalents to extend the scope of its patent claims to include plastic.

The district court found further support for this conclusion in SciMed Life Systems v. Advanced Cardiovascular Systems, 242 F.3d 1337 (Fed. Cir. 2001), where we explained that:

Where the specification makes clear that the invention does not include a particular feature, that feature is deemed to be outside the reach of the claims of the patent, even though the language of the claims, read without reference to the specification, might be considered broad enough to encompass the feature in question.

Id. at 1341.

Having specifically identified, criticized, and disclaimed [a specific] configuration, the patentee cannot now invoke the doctrine of equivalents to “embrace a structure that was specifically excluded from the claims.”

Id. at 1345 (citation omitted).

Based upon these precedents, the district court determined that PSC had disclosed and dedicated the use of non-metallic resilient materials, specifically including plastic, and could not now invoke the doctrine of equivalents to embrace specifically disclosed materials that had not been claimed. The district court granted Foxconn summary judgment of non-infringement. PSC timely appealed. We have jurisdiction of this appeal pursuant to 28 U.S.C. § 1295(a)(1).

## DISCUSSION

### A. Standard of Review

This court reviews the grant of summary judgment de novo. Genzyme Corp. v. Transkaryotic Therapies, Inc., 346 F.3d 1094, 1096 (Fed. Cir. 2003); Pickholtz v. Rainbow Techs., Inc., 284 F.3d

1365, 1371 (Fed. Cir. 2002); Ethicon Endo-Surgery, Inc. v. United States Surgical Corp., 149 F.3d 1309, 1315 (Fed. Cir. 1998). Summary judgment is appropriate when there are no genuine issues of material fact and the moving party is entitled to judgment as a matter of law. Fed. R. Civ. P. 56; Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 247-48 (1986).

A determination of patent infringement requires a two-step analysis. The court must first interpret the claims to determine their scope and meaning. Cybor Corp. v. FAS Techs. Inc., 138 F.3d 1448, 1454 (Fed. Cir. 1998) (en banc). It must then compare the properly construed claims to the allegedly infringing device. Id. The first step, claim construction, is a matter of law that we review de novo. Id. at 1451. The second step is a factual question that we review following a trial for clear error. Bai v. L & L Wings, Inc., 160 F.3d 1350, 1353 (Fed. Cir. 1998). When conducting a de novo review of a district court's grant of summary judgment, however, we construe the facts in the light most favorable to the non-movant. Mazzari v. Rogan, 323 F.3d 1000, 1005 (Fed. Cir. 2003). To prove infringement, the patentee must show that the accused device meets each claim limitation, either literally or under the doctrine of equivalents. Deering Precision Instruments, L.L.C. v. Vector Distrib. Sys., 347 F.3d 1314, 1324 (Fed. Cir. 2003).

#### B. The Disclosure-Dedication Rule

Although an infringement analysis typically begins with claim construction, Cybor, 138 F.3d at 1454, the district court here did not construe the claims of the '239 patent because their meaning is not disputed. The district court turned immediately to the factual comparison of the '239 patent's claim language to Foxconn's plastic clip, see Bai, 160 F.3d at 1353, to determine infringement. We do likewise.

PSC, who bears the burden of proving infringement either literally or under the doctrine of equivalents, see Deering, 347 F.3d at 1324, concedes that Foxconn's clip does not literally infringe the '239 patent. The entire infringement analysis turns on whether PSC can claim plastic clips under the doctrine of equivalents, despite having disclosed in its written description that plastic parts were used in the prior art and having failed to include plastic in its claims. A patentee may not write narrow claims

for allowance by the PTO and subsequently attempt to broaden the claims in court by using the doctrine of equivalents. Autogiro Co. of Am. v. United States, 181 Ct. Cl. 55, 60 (1967) (“Courts can neither broaden nor narrow the claims to give the patentee something different than what he has set forth.”).

The issue to be resolved by this court is the scope of our ruling in Johnson. PSC argues that this case differs from Johnson in that the Johnson disclosure was clear and specific, while the PSC disclosure is not. In Johnson, U.S. Patent No. 5,153,050 (the “‘050 patent”) related to the manufacture of printed circuit boards. Though the ‘050 patent’s claim language specifically claimed a sheet of aluminum, its written description explained that “[w]hile aluminum is currently the preferred material . . . other metals, such as stainless steel or nickel alloys, may be used.” Johnson, 285 F.3d at 1050 (citing ‘050 patent). The accused infringing product was made of stainless steel. Id. We held that the ‘050 patent dedicated the alternative material, stainless steel, to the public, and that the defendant’s stainless steel product could therefore not infringe the ‘050 patent as a matter of law. Id.

Similarly, in Maxwell, U.S. Patent No. 4,624,060 (the “‘060 patent”) claimed a system for attaching mated shoes together for display in a retail environment. The ‘060 patent disclosed in the written description, but did not claim, that “the tabs may be stitched into a lining seam of the shoes at the sides or back of the shoes” Maxwell, 86 F.3d at 1106 (citing ‘060 patent). The accused product stitched the tabs into a lining seam of the shoes. Id. We held that the ‘060 patent had dedicated the alternative method of keeping mated shoes together by stitching tabs into a lining seam of the shoes at the sides or back of the shoes to the public, and that the defendant’s product employing that alternative could therefore not infringe the ‘060 patent as a matter of law. Id.

According to PSC, the Johnson written description clearly dedicated matter to the public because of the precision and clarity of its disclosure. Here, PSC argues that the disclosure of plastic in the written description of the ‘239 patent was neither precise nor clear, and should not constitute a dedication to the public.

We must answer two questions: (1) How specific must a disclosure in a written description be to

dedicate matter to the public? and (2) Was the '239 written description sufficiently specific to dedicate plastic parts to the public?

PSC is correct in noting that Johnson, like Maxwell, involved a clear, precise disclosure. Anyone reading the patents would have recognized both the Johnson disclosure of stainless steel and the Maxwell disclosure of tabs stitched into a lining seam of the shoes as explicit alternatives to the inventions claimed in the '050 and '060 patents, respectively. PSC argues that only language as clear as the Johnson or the Maxwell disclosures is sufficient to dedicate matter to the public, and that because the '239 patent's disclosure of prior art made of plastic is oblique and incidental, plastic clip parts were never dedicated to the public.

We disagree. PSC's disclosure that the prior art included clips with plastic parts was both precise and clear. One important purpose of the written description is to provide notice to the public as to the subject matter of the patent, while the claim provides notice as to the scope of the invention. The '239 patent's claim language placed the public on notice that metal clip parts would infringe. Its written description served notice that plastic had been used as an alternative to metal in the prior art, and that the future use of plastic would therefore not infringe.

To appreciate the two aspects of this notice function, it is important to recall that claims and written descriptions are both integral parts of a patent under 35 U.S.C. § 112. The Supreme Court long ago explained that:

Accurate description of the invention is required by law, for several important purposes: 1. That the government may know what is granted, and what will become public property when the term of the monopoly expires. 2. That licensed persons desiring to practise the invention may know during the term how to make, construct, and use the invention. 3. That other inventors may know what part of the field of invention is unoccupied.

Bates v. Coe, 98 U.S. 31, 39 (1878). These fundamental precepts of patent law have remained unchanged for more than a century and a quarter; we reiterated them in Johnson, 285 F.3d at 1052 (“Both the Supreme Court and this court have adhered to the fundamental principle that claims define the scope of patent protection. . . . The claims give notice both to the examiner at the U.S. Patent and

Trademark Office during prosecution, and to the public at large, including potential competitors, after the patent has issued.” (citations omitted)).

The relationship between a patent’s claim and its written description has also long been understood:

While the claims of a patent limit the invention, and specifications cannot be utilized to expand the patent monopoly, Burns v. Meyer, 100 U.S. 671, 672 (1880); McCarty v. Lehigh Valley R. Co., 160 U.S. 110, 116 (1895), it is fundamental that claims are to be construed in the light of the specifications and both are to be read with a view to ascertaining the invention, Seymour v. Osborne, 11 Wall. 516, 547 (1871); Schriber-Schroth Co. v. Cleveland Trust Co., 311 U.S. 211 (1940); Schering Corp. v. Gilbert, 153 F.2d 428 (1946).

United States v. Adams, 383 U.S. 39, 48-49 (1966).

By thus limiting the invention, id., claims serve the important notice function of informing the public that anyone who makes, uses, or sells the claimed invention infringes the patent. 35 U.S.C. § 271 (a). Our predecessor court captured this point in a nutshell: “The use of the specification as a concordance for the claims is accepted by almost every court, and is a basic concept of patent law.” Autogiro, 181 Ct. Cl. at 63.

In essence, the written description can, at times, assist the public in understanding the notice given in the claims by explaining which portions of the relevant art the patent does not cover. Scimed, 242 F.3d at 1341. To quote an oft-repeated phrase: “Specifications teach. Claims claim.” SRI Int’l v. Matsushita Elec. Corp., 775 F.2d 1107, 1121 n.14 (Fed. Cir. 1985). “Consistent with its scope definition and notice functions, the claim requirement presupposes that a patent applicant defines his invention in the claims, not in the specification. After all, the claims, not the specification, provide the measure of the patentee’s right to exclude.” Johnson, 285 F.3d at 1052.

Suitable notice to the public, however, requires that the public understand the language of both the claims and the written description. We have repeatedly explained that, in the absence of a compelling reason to do otherwise, claims must be interpreted as one of ordinary skill in the art would understand them. See, e.g., Apex Inc. v. Raritan Computer, Inc., 325 F.3d 1364, 1371 (Fed. Cir. 2003)

(“In analyzing the intrinsic evidence, we start with the language of the claims and engage in a ‘strong presumption’ that claim terms carry their ordinary meaning as viewed by one of ordinary skill in the art.”); BJ Servs. Co. v. Halliburton Energy Servs., 338 F.3d 1368, 1372 (Fed. Cir. 2003) (“The question becomes whether one of ordinary skill in the art would understand what is claimed when the claim is read in light of the specification.”); Dow Chem. Co. v. Sumitomo Chem. Co., 257 F.3d 1364, 1372 (Fed. Cir. 2001) (“As a starting point, we give claim terms their ordinary and accustomed meaning as understood by one of ordinary skill in the art.”). It thus follows as a matter of simple logic that, in the absence of a compelling reason to do otherwise, the written description must also be interpreted according to the understanding of one of ordinary skill in the art.

Taken together, then, one of ordinary skill in the art should be able to read a patent, to discern which matter is disclosed and discussed in the written description, and to recognize which matter has been claimed. “The presumption is, and such is generally the fact, that what is not claimed was not invented by the patentee, but was known and used before he made his invention. But, whether so or not, his own act has made it public property if it was not so before.” Mahn v. Harwood, 112 U.S. 354, 361 (1884). The ability to discern both what has been disclosed and what has been claimed is the essence of public notice. It tells the public which products or processes would infringe the patent and which would not. Were the patentee allowed to reclaim some specifically-disclosed-but-unclaimed matter under the doctrine of equivalents, the public would have no way of knowing which disclosed matter infringed and which did not. See Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 344 F.3d 1359, 1369-70 (Fed. Cir. 2003) (en banc). Such a reclamation would eviscerate the public notice function of patents and create uncertainty in the law. Id.

We thus hold that if one of ordinary skill in the art can understand the unclaimed disclosed teaching upon reading the written description, the alternative matter disclosed has been dedicated to the public. This “disclosure-dedication” rule does not mean that any generic reference in a written specification necessarily dedicates all members of that particular genus to the public. The disclosure must be of such specificity that one of ordinary skill in the art could identify the subject matter that had been disclosed and not claimed.

### C. Disclosure-Dedication in the '239 Patent

The passages that the district court identified in the '239 written description illustrate both generic and specific disclosures. We agree with PSC that the generic disclosure that “other resilient materials may be suitable for the strap,” '239 patent, col. 4, ll. 50-51, did not dedicate all resilient materials other than stainless steel to the public. We agree with the district court, however, that the specific disclosure that “[o]ther prior art devices use molded plastic and/or metal parts that must be cast or forged which again are more expensive metal forming operations,” Id., col. 2, ll. 39-41, dedicated the alternative use of plastic parts to the public. A reader of ordinary skill in the art could reasonably conclude from this language in the written description that plastic clip parts could be substituted for metal clip parts. PSC was thus obliged either to claim plastic parts in addition to metal parts and to submit this broader claim for examination, or to not claim them and dedicate the use of plastic parts to the public. The '239 patent's claims and written description thus combined to put the public on notice that clips made of metal parts would infringe, while those made of plastic parts would not. The district court in essence concluded that that one of ordinary skill in the art would be compelled to read the written description to establish that plastic parts may serve as an alternative to the metal parts in the claim.

The disclosure-dedication rule requires an inventor who discloses specific matter to claim it, and to submit the broader claim for examination. Otherwise, that matter is dedicated to the public and may not be recaptured under the doctrine of equivalents. The use of plastic parts in the manufacture of cam-type retainer clips for heat sinks was therefore dedicated to the public, and Foxconn's plastic clips could not infringe as a matter of law.

### D. PSC's Equitable and Public Policy Concerns

PSC raises a number of important issues of equity and of public policy concerning the disclosure-dedication rule. PSC contends that the “metal” limitation of the '239 patent was inadvertent, and that it is thus unfair to dedicate plastic to the public. The Supreme Court recently noted that “[t]he patentee, as the author of the claim language, may be expected to draft claims encompassing readily known equivalents,” Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 535 U.S. 722, 741 (2002).

This expectation follows as a matter of course from the Supreme Court's (much) earlier observation: "Every day that passes after the issue of the patent adds to the strength of [the public's right to use unclaimed matter], and increases the barrier against subsequent expansion of the claim by reissue under a pretence of inadvertence and mistake." Mahn, 112 U.S. at 361. The patentee, rather than the public, must bear the burden of inadvertent errors in the patent—including inadvertent dedications.<sup>[1]</sup>

As a matter of policy, PSC argues that a disclosure-dedication rule broad enough to encompass its own disclosure of plastic will motivate future patentees to draft sparse written descriptions to ensure that they are not inadvertently dedicating anything to the public. We disagree. We expect the disclosure-dedication rule to motivate patentees to draw the broadest claims that they consider to be patentable, and to submit these broad claims to the PTO for examination. The disclosure-dedication rule, as specified today, should thereby serve the important public notice function of patents—the mechanism whereby the public learns which innovations are the subjects of the claimed invention, and which are in the public domain. Johnson, 285 F.3d at 1052. The disclosure-dedication rule is thus both equitable and in the public interest.

## CONCLUSION

Because the district court correctly concluded that the '239 patent disclosed the use of plastic parts but did not claim it, we affirm its summary judgment of non-infringement.

## AFFIRMED

## COSTS

Each party shall bear its own costs.

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[1] The patent law does include at least two ways for a patentee to correct such oversights: continuation and reissuance. See Johnson, 285 U.S. at 1055.