

# **United States Court of Appeals for the Federal Circuit**

04-1437, -1438, -1471

BOSS CONTROL, INC.  
and 1217537 ONTARIO LIMITED PARTNERSHIP,

Plaintiffs-Appellants,

v.

BOMBARDIER INC.  
and SPORTS CARS, INC. OF HOUSTON  
(doing business as Northwest Honda),

Defendants-Cross Appellants.

Robert M. Bowick, The Matthews Firm, of Houston, Texas, argued for plaintiffs-appellants. On the brief was Guy E. Matthews.

Harry C. Marcus, Morgan & Finnegan, L.L.P., of New York, New York, argued for defendants-cross appellants. With him on the brief were John F. Sweeney, Richard Straussman, and Richard W. Erwine.

Appealed from: United States District Court for the Southern District of Texas

Judge Kenneth M. Hoyt

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DECIDED: June 8, 2005

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Before SCHALL, GAJARSA, and PROST, Circuit Judges.

PROST, Circuit Judge.

Boss Control, Inc. and 1217537 Ontario Limited Partnership (collectively, "Boss") appeal from a decision of the United States District Court for the Southern District of Texas granting summary judgment of noninfringement of United States Patent No. 5,734,206 (the "'206 patent") in favor of Bombardier Inc. and Sports Cars, Inc. of Houston (collectively, "Bombardier"). See Boss Control, Inc. v. Bombardier Inc., No. H-00-3491 (S.D. Tex. Apr. 30, 2004). Bombardier conditionally cross-appeals from a prior decision of the district court denying Bombardier's motion for summary judgment of invalidity of the '206 patent. See Boss Control, Inc. v. Bombardier Inc., No. H-00-3491 (S.D. Tex. Sept. 15, 2003). We affirm the district court's grant of summary judgment of

noninfringement and therefore do not reach Bombardier's conditional cross-appeal concerning invalidity.

## BACKGROUND

The '206 patent discloses a security power interrupt apparatus that prevents the unauthorized use of an electrically operated device. '206 patent, col. 1, ll. 14-20. In the written description of the '206 patent, the inventors distinguish their invention from prior art devices that "conventionally provide for on-off control only." Id. at col. 1, ll. 36-37. In contrast, when in an "interrupt mode," the apparatus retains a connection to a power supply that allows auxiliary electrical equipment to operate. Id. at col. 1, ll. 51-57; col. 6, ll. 3-6. The apparatus may automatically switch to the interrupt mode in various ways, such as when a component like a key pad is detached from the device. Id. at col. 2, ll. 7-11; col. 5, l. 60-67. When in the interrupt mode, power to the device is not completely shutoff until a preset electrical current is exceeded, for example by turning on a high-current drawing component of the device. Id. at col. 1, ll. 53-54; col. 6, ll. 13-19. In this way unauthorized attempts to use the device are immediately obvious from the fact that the auxiliary electrical equipment no longer operates. Id. at col. 6, ll. 19-24.

Boss filed suit against Bombardier, alleging infringement of the '206 patent. The parties focus on claim 7. This claim recites:

An interrupt system which is operative to interrupt the transmission of power from a power supply to an electrical load, comprising:

a controller, wherein said controller is operative to selectively supply or interrupt power to the load,

a code-providing device detachably operatively connected with the controller, wherein said code-providing device is operable to provide an authorization code to said controller when operatively connected thereto, and wherein said controller is operative to supply power to the load

responsive to the code-providing device providing said authorization code to the controller, and

wherein the controller is operative to monitor the operative connection with said code-providing device, and  
wherein said controller is operative to interrupt power to the load responsive to said code-providing device being operatively disconnected from said controller.

Id. at col. 8, ll. 21-38 (emphasis added). In its answer, Bombardier asserted several affirmative defenses but did not present any counterclaims.

The accused devices include personal watercraft and snowmobiles equipped with a Digitally Encoded Security System (“DESS”). An operator of one of these watercraft or snowmobiles wears a lanyard that includes a cap that fits onto a post on the vehicle. The cap includes a semiconductor chip that carries an electronic code that the vehicle recognizes when the cap is connected to the post. In the case of the watercraft, the DESS allows the watercraft’s engine to start only when the cap carrying the correct code is in place. When the cap is pulled off of the post, for example when the operator falls off of the watercraft, the watercraft’s engine as well as auxiliary gauges and lights immediately turn off. However, power is supplied to the watercraft’s auxiliary gauges and lights for thirty seconds if the operator tries to restart the watercraft’s engine without reattaching the cap carrying the correct code. The snowmobile operates slightly differently than the watercraft. For example, the DESS allows the snowmobile’s engine to start and idle so long as any cap is attached to the post. However, only when the proper cap is in place is the snowmobile allowed to accelerate. When any cap is pulled off of the post, the snowmobile’s engine as well as auxiliary gauges and lights immediately turn off. Power is not supplied to the

snowmobile's auxiliary gauges and lights for any amount of time if the operator tries to start the snowmobile's engine without a cap in place.

The district court denied Bombardier's motion for summary judgment of invalidity, but granted Bombardier's motion for summary judgment of noninfringement. The court found that the accused devices do not (1) "monitor the operative connection with said code-providing device" or (2) "interrupt power to the load responsive to said code-providing device being operatively disconnected from said controller." The court did not address infringement under the doctrine of equivalents.

Boss appeals the grant of summary judgment of noninfringement. Bombardier conditionally cross-appeals the denial of summary judgment of invalidity. We have jurisdiction over a final judgment under 28 U.S.C. § 1295(a)(1).<sup>1</sup>

## DISCUSSION

### A. Standard of Review

We review a district court's grant of summary judgment de novo, reapplying the standard applicable at the district court. Rodime PLC v. Seagate Tech., Inc., 174 F.3d 1294, 1301 (Fed. Cir. 1999). Summary judgment is only appropriate when "there is no genuine issue as to any material fact and . . . the moving party is entitled to a judgment

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<sup>1</sup> As noted above, Bombardier only filed affirmative defenses and not counterclaims. Since there are no pending counterclaims with respect to invalidity, the district court entered a proper final judgment. See Lighting World, Inc. v. Birchwood Lighting, Inc., 382 F.3d 1354, 1366 (Fed. Cir. 2004) (noting that, because the alleged infringer raised invalidity as an affirmative defense and not as a counterclaim, it was unnecessary for the district court to enter a judgment as to the invalidity issue when entering a judgment of noninfringement); cf. Pause Tech. LLC v. TiVo Inc., 401 F.3d 1290, 1293-95 (Fed. Cir. 2005) (dismissing an appeal for lack of jurisdiction because pending counterclaims of invalidity rendered a judgment of noninfringement nonfinal). We therefore have jurisdiction to address the district court's grant of summary judgment of noninfringement.

as a matter of law.” Fed. R. Civ. P. 56(c); Fierros v. Tex. Dep’t of Health, 274 F.3d 187, 190 (5th Cir. 2001). Determining infringement requires two steps. “First, the claim must be properly construed to determine its scope and meaning. Second, the claim as properly construed must be compared to the accused device or process.” Carroll Touch, Inc. v. Electro Mech. Sys., Inc., 15 F.3d 1573, 1576 (Fed. Cir. 1993). Claim construction is an issue of law that we review de novo. Cybor Corp. v. FAS Techs., Inc., 138 F.3d 1448, 1456 (Fed. Cir. 1998) (en banc); Markman v. Westview Instruments, Inc., 52 F.3d 967, 979 (Fed. Cir. 1995) (en banc), aff’d, 517 U.S. 370 (1996). Infringement, whether literal or under the doctrine of equivalents, is a question of fact. Bai v. L & L Wings, Inc., 160 F.3d 1350, 1353 (Fed. Cir. 1998). The proper inquiry is whether the evidence is such that a reasonable jury could return a verdict for the non-movant. See Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 252 (1986). We must draw all justifiable inferences in favor of the non-movant. Id.

## B. Analysis

### 1. Claim Construction

Boss argues that the district court erred in construing “wherein said controller is operative to interrupt power to the load responsive to said code-providing device being operatively disconnected from said controller.” Specifically, Boss contends that “interrupt” should be given its ordinary and accustomed meaning of “to break off” or “to shut or cut off.” Bombardier responds by arguing that the inventors gave a special definition to the term “interrupt” that does not involve simple “on-off” control of electrical power.

To interpret “interrupt,” we first consult “the intrinsic evidence of record, i.e., the patent itself, including the claims, the specification and, if in evidence, the prosecution history.” Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996). “Although words in a claim are generally given their ordinary and customary meaning, a patentee may choose to be his own lexicographer and use terms in a manner other than their ordinary meaning, as long as the special definition of the term is clearly stated in the patent specification or file history.” Id. “Thus, . . . it is always necessary to review the specification to determine whether the inventor has used any terms in a manner inconsistent with their ordinary meaning. The specification acts as a dictionary when it expressly defines terms used in the claims or when it defines terms by implication.” Id. In fact, the specification “is the single best guide to the meaning of a disputed term.” Id. However, “the court may also consider the prosecution history of the patent, if in evidence.” Id. “In most situations, an analysis of the intrinsic evidence alone will resolve any ambiguity in a disputed claim term. In such circumstances, it is improper to rely on extrinsic evidence.” Id.

In this case the specification of the '206 patent clearly gives the term “interrupt” a special definition. In the “Background of the Invention” section, the specification states:

In the prior art, means have been provided to prevent unauthorized usage of electrical appliances and similar electrically operated devices, primarily through key operated electro-mechanical circuit interrupt devices. However, such devices conventionally provide for on-off control only, meaning that the device completely interrupts the flow of electrical power to the appliance while in the interrupt or “locked” state, and it connects the appliance to the electrical supply in the operative or “unlocked” state.

'206 patent, col. 1, ll. 33-42. The "Summary of the Invention" section goes on to distinguish the invention from the prior art discussed in the Background of the Invention:

In accordance with one aspect of the invention the appliance or device retains a connection to the power supply while in interrupt or "locked" mode; complete power shutoff only occurs when a preset electrical current is exceeded, thus allowing operation of the appliance's auxiliary electrical equipment while the interrupt device is in the interrupt mode.

Id. at col. 1, ll. 51-57. The specification therefore distinguishes between simple on-off interruption of electrical power and interruption of electrical power that occurs in two stages. In the first stage, a device retains a connection to a power supply such that auxiliary electrical equipment continues to operate. In the second stage, power to the device is completely shut off in response to current exceeding a preset limit. Thus, according to the specification, when electrical power is "interrupted," current is allowed to flow to the device up to a preset limit during a first stage of operation, and when the preset limit is exceeded, a second stage of operation is entered in which power to the device is completely shut off. In these ways, the specification clearly sets forth a definition of "interrupt" that is more detailed than simple on-off control.

The preferred embodiments are consistent with this definition of "interrupt." "[W]hile it is of course improper to limit the claims to the particular preferred embodiments described in the specification, the patentee's choice of preferred embodiments can shed light on the intended scope of the claims." Astrazeneca AB v. Mut. Pharm. Co., 384 F.3d 1333, 1340 (Fed. Cir. 2004). The "Detailed Description of the Invention" section of the '206 patent discloses a preferred embodiment of the invention in the form of an interrupt device coupled to a household appliance such as an

electric stove. This section describes the operation of the interrupt device and the stove:

In the preferred embodiment, when the appliance 11 is in the interrupt mode, auxiliary functions, such as a clock and/or light, remain operational, so long as their combined current draw is less than the "current threshold". When an unauthorized person attempts to use the heating functions of the appliance 11, which draw a comparatively greater current, the current threshold will be exceeded and the relay contacts 20 or 21 will be opened, disconnecting the main power supply from the appliance while still supplying power to the microcontroller 26 through DC power supply 25.

It will be understood that in the described embodiments the device in the interrupt mode does not actually cut off power to the appliance, i.e. interrupt the main power supply, until the current threshold is exceeded by turning on a high current-drawing component of the appliance 11, such as a heating element.

Thus unauthorized attempts to use the appliance in the described embodiment wherein the interrupt device is operatively connected with a stove, are immediately obvious from the fact that the auxiliary clock and light functions of the stove no longer operate.

'206 patent, col. 6, ll. 3-23. This description confirms that, in the context of the invention, interruption of power to an electrical device involves two stages: a first stage in which auxiliary functions remain operational so long as a combined current draw is less than a current threshold, and a second stage in which power to the device is completely disconnected in response to the current threshold being exceeded.

In contrast to the way in which the specification distinguishes the invention's concept of a two-stage interruption of electrical power from the simple on-off interruption of electrical power in prior art devices, Boss argues that we should construe "interrupt" as "to break off" or "to shut or cut off." To support this construction, Boss points to a dictionary as well as the prosecution history of the '206 patent. Neither the dictionary

definition nor the prosecution history, however, overcomes the particular meaning of “interrupt” clearly set forth in the specification. While at least one dictionary defines “interrupt” as “to break off” or “to shut or cut off,” as discussed above the specification clearly sets forth a definition of “interrupt” that is not limited to a simple on-off control of electrical power. Furthermore, while it is true that during prosecution the applicants twice used the phrase “cut off” interchangeably with the term “interrupt,” this usage does not operate to erase the clear definition of “interrupt” found in the specification of the ’206 patent. Moreover, this usage of “interrupt” is consistent with the second stage of the interrupt mode described in the specification: complete disconnection of power.

Boss also attempts to distinguish claim 7’s use of the term “interrupt” from use of the phrase “interrupt mode” found elsewhere in specification, including other claims. Use of the term “interrupt” in the context of claim 7, however, is consistent with use of the phrase “interrupt mode” in the remainder of the specification. For example, the specification describes how the interrupt device switches to the interrupt mode:

the interrupt device is switched to the interrupt mode in one of three ways: . . . 2) the authorized person detaches or uncouples the key pad 27 from the main body 10 by disconnecting plug 42 on cord 41 from the receptacle 43 in the key pad 27 . . .

’206 patent, col. 5, ll. 61-67. This description makes clear that one of the ways in which the interrupt device switches to the interrupt mode is when a key pad is detached, uncoupled, or disconnected from the interrupt device. Similarly, claim 7 recites “wherein said controller is operative to interrupt power to the load responsive to said code-providing device being operatively disconnected from said controller.” “Interrupt” as it is

used in claim 7 is therefore fully consistent with the “interrupt mode” discussed elsewhere in the specification.

Because the specification makes clear that the invention involves a two-stage interrupt mode, the intrinsic evidence binds Boss to a narrower definition of “interrupt” than the extrinsic evidence might support. See Astrazeneca, 384 F.3d at 1338. See also SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc., 242 F.3d 1337, 1341 (Fed. Cir. 2001) (“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.”).

In sum, “interrupt” requires: (1) providing electrical current to a device up to a preset threshold so that auxiliary components may continue to operate; and (2) completely shutting off electrical current to the device when the electrical current exceeds the preset threshold. The district court did not err in its claim construction.

## 2. Infringement

### a. Literal

Boss argues that there is a question of fact as to infringement even under the district court’s claim construction since Bombardier’s watercraft operate in both of the interrupt stages. In particular, Boss argues that infringement occurs when a watercraft’s DESS shuts off power to the watercraft’s engine due to removal of the cap from the post but retains the ability to supply power to the auxiliary gauges and lights for thirty seconds if an attempt is made to start the watercraft’s engine.

We agree with the district court that there is no genuine issue of material fact with respect to literal infringement by the watercraft because the watercraft do not “interrupt power to the load responsive to said code-providing device being operatively disconnected from said controller.” A watercraft’s DESS does not “interrupt” power in response to disconnection of the plug from the post because the DESS does not provide electrical current to the watercraft up to a preset threshold so that auxiliary components of the watercraft may continue to operate. Neither does the watercraft’s DESS completely shut off electrical current to the watercraft when the electrical current exceeds a preset threshold. The ability to operate the auxiliary gauges, lights, and engine of the watercraft does not in any way depend on the current level.

Moreover, the watercraft’s DESS completely shuts off electrical current to the watercraft when the plug is removed from the post. As Boss conceded at oral argument, the watercraft’s DESS prevents current from flowing to the watercraft’s auxiliary equipment immediately after the plug is removed from the post. For example, if an auxiliary light on a watercraft is lit just before the plug is removed from the post, the auxiliary light darkens once the plug is removed from the post because the DESS immediately and completely shuts off current to the light. Current is not provided to the watercraft at all immediately after the plug is removed from the post, let alone up to a preset threshold.

At oral argument, Boss argued that this on-off function of the watercraft’s DESS does not prevent a finding of infringement because the watercraft’s DESS supplies power to auxiliary equipment for thirty seconds if there is an attempt to start the watercraft’s engine in the absence of the correct cap. In other words, Boss argues that

merely retaining a physical connection to the power supply suffices for infringement. We disagree. The ability to provide current to the watercraft in response to an attempt to start the watercraft's engine through a remaining physical connection does not alter the fact that the watercraft's DESS does not actually provide electrical current to the watercraft at all, let alone up to a preset threshold, immediately after the plug is removed from the post. Retaining a physical connection in the form of a hardwire connection to a power supply does not mean that current is continued to be provided through the hardwire connection up to a preset threshold. For these reasons, we agree with the district court that summary judgment of no literal infringement is appropriate with respect to Bombardier's watercraft.

Boss does not separately analyze infringement by Bombardier's snowmobiles. Nevertheless, we find that summary judgment of no literal infringement is also appropriate with respect to the snowmobiles. The ability to operate the auxiliary gauges, lights, and engine of the snowmobiles, like the watercraft, does not in any way depend on the current level. Moreover, when any cap is pulled off of the post, the snowmobile's engine as well as auxiliary gauges and lights immediately turn off, and no current is continued to be supplied to the auxiliary gauges and lights. In addition, power is not supplied to the snowmobile's auxiliary gauges and lights for any amount of time if the operator tries to start the snowmobile's engine without a cap in place. For these reasons, we agree with the district court that summary judgment of no literal infringement is appropriate with respect to Bombardier's snowmobiles.

### b. Doctrine of Equivalents

Boss argues that the district court's failure to determine infringement under the doctrine of equivalents constitutes reversible error. Bombardier responds by arguing, inter alia, that Boss cannot rely on the doctrine of equivalents because Boss did not rely on it before the district court in opposing summary judgment.

Bombardier is correct that Boss failed to present any arguments concerning the doctrine of equivalents to the district court. Boss failed to address infringement under the doctrine of equivalents in its complaint or in its two briefs to the district court on the issue of summary judgment of noninfringement. The only mention of the doctrine of equivalents in either brief is in one sentence that states that “[a] patent claim can be infringed in two ways, literally or under the doctrine of equivalents.” This single reference to the doctrine of equivalents in Boss's briefs, without further argument specifically addressing infringement under the doctrine of equivalents or referencing evidence showing infringement under the doctrine of equivalents, does not present anything for this court to “review.” See Sage Prods. Inc. v. Devon Indus., 126 F.3d 1420, 1426 (Fed. Cir. 1997) (noting that, with few exceptions, “this court does not ‘review’ that which was not presented to the district court”). Because Boss failed to present substantive arguments to the district court concerning infringement under the doctrine of equivalents, we hold that Boss waived the issue.<sup>2</sup>

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<sup>2</sup> In light of our conclusion that summary judgment of noninfringement is appropriate based on the correct construction of the “interrupt” limitation, we decline to address the construction or the alleged infringement of “wherein the controller is operative to monitor the operative connection with said code-providing device.” See Hoffer v. Microsoft Corp., No. 04-1103, slip op. at 6 (Fed. Cir. Apr. 22, 2005).

### 3. Cross-appeal

Bombardier only conditionally cross-appeals the denial of summary judgment of invalidity. In light of our decision on infringement, we are left with the situation in which, effectively, the district court's findings with regard to invalidity have not been appealed. See Power Mosfet Techs., L.L.C. v. Siemens AG, 378 F.3d 1396, 1413 n.3 (Fed. Cir. 2004) (rejecting the argument that Cardinal Chemical Co. v. Morton International Inc., 508 U.S. 83 (1993), requires review of conditionally appealed invalidity findings). We therefore do not address the merits of the cross-appeal.<sup>3</sup>

## CONCLUSION

The district court correctly construed "interrupt"; there is no genuine issue of material fact regarding literal infringement; and Boss waived the issue of infringement under the doctrine of equivalents. We therefore affirm the district court's grant of summary judgment of noninfringement and dismiss Bombardier's conditional cross-appeal concerning invalidity.

AFFIRMED

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<sup>3</sup> That is not to say that Bombardier's cross-appeal, if not conditional, would be proper. In Lighting World, 382 F.3d at 1366, we dismissed a cross-appeal in strikingly similar circumstances. Furthermore, we have doubts that the issue of invalidity is inextricably intertwined with the issue of infringement, or that resolution of the issue of invalidity is necessary to ensure meaningful review of the issue of infringement, even though both issues share a common claim construction. See Swint v. Chambers County Comm'n, 514 U.S. 35, 50-51 (1995) (suggesting that pendant jurisdiction over an interlocutory appeal might be appropriate when two decisions are "inextricably intertwined" or when resolution of one is "necessary to ensure meaningful review" of another).