NOTE: This disposition is nonprecedential.

United States Court of Appeals for the Federal Circuit

HTC CORPORATION, HTC AMERICA, ZTE (USA) INC.,

Appellants

 \mathbf{v} .

CELLULAR COMMUNICATIONS EQUIPMENT, LLC,

Appellee

2016-1858

Appeal from the United States Patent and Trademark Office, Patent Trial and Appeal Board in No. IPR2014-01133.

Decided: July 17, 2017

BRIAN CHRISTOPHER NASH, Pillsbury Winthrop Shaw Pittman LLP, Austin, TX, argued for appellants. Also represented by STEVEN ARTHUR MOORE, MATTHEW ROBERT STEPHENS, San Diego, CA.

JOHN P. MURPHY, Nelson Bumgardner PC, Fort Worth, TX, argued for appellee. Also represented by BARRY JAMES BUMGARDNER.

Before DYK, REYNA, and TARANTO, Circuit Judges.

Opinion for the court filed by Circuit Judge TARANTO.

Opinion dissenting in part filed by Circuit Judge DYK.

TARANTO, Circuit Judge.

Cellular Communications Equipment, LLC (CCE) owns U.S. Patent No. 7,218,923, which describes and claims systems and methods for preventing third-party applications on smartphones from sending fraudulent and other problematic messages. Several groups of companies, including HTC Corp., HTC America, and ZTE (USA), Inc. (jointly, HTC), petitioned for an inter partes review (IPR) of certain claims of the '923 patent under 35 U.S.C. §§ 311-312. The Patent Trial and Appeal Board of the Patent and Trademark Office, acting as the delegate of the Office's Director, 37 C.F.R. §§ 42.4(a), 42.108, instituted a review of claims 1, 2, 4, 5, 8, 24, 25, and 31. The Board subsequently rejected HTC's challenges. Corp. v. Cellular Commc'ns Equip., LLC, No. IPR2014-01133, 2016 WL 67220, at *7 (P.T.A.B. Jan. 4, 2016) (Final Written Decision). HTC appeals. We affirm.¹

Ι

According to the '923 patent, the existence of open development platforms for mobile communication terminals (such as smartphones) creates a risk that users of those communication terminals will download applications that may "behave contrary to the agreements made with the

¹ HTC was joined in the IPR by co-petitioners NEC Corporation of America; NEC CAISO Mobile Communications, Ltd.; LG Electronics, Inc.; LG Electronics U.S.A., Inc.; Pantech Co., Ltd.; and Pantech Wireless, Inc. By the time HTC filed its opening brief in this court, only HTC remained as a challenger.

operator of the network, for example." '923 patent, col. 1, lines 38–47. The patent offers a solution. Messages that certain applications attempt to send over the network are diverted to a "controlling entity" that "resides in a tamper resistant area of the terminal." *Id.*, col. 1, line 59, though col. 2, line 10. The controlling entity then checks the message to determine "whether any changes are needed in the message or in the behavior of the application," and will either allow the message through, modify it, or stop it. *Id.* Claims 1 and 24 are the only independent claims and are representative:

1. A method for controlling application programs in a communication terminal, the method comprising:

sending messages from an application program towards a communication network, the application program residing in a communication terminal;

diverting a message of the messages to a controlling entity residing in the communication terminal; and

based on the message, controlling in the controlling entity whether the application program behaves in a predetermined manner in the communication terminal, the controlling being performed before the message is transmitted from the communication terminal to the communication network.

Id., col. 9, lines 10–22.

24. A terminal for a communication system, the terminal comprising:

an application program configured to send messages towards a communication network; and

a diverting unit configured to divert a message of the messages sent from the application program and destined for the communication network to a controlling entity residing in the terminal,

wherein the controlling entity is configured to control, based on the message and before the message is transmitted to the communication network, whether the application program behaves in a predetermined manner in the communication terminal, and

wherein the terminal is a terminal of a communications system.

Id., col. 10, line 58, though col. 11, line 5.

The Board instituted a review of the patentability of claims 1, 2, 4, 5, 8, 24, 25, and 31 on two grounds: (1) anticipation by U.K. Patent Pub. No. 2,376,766 (D'Aviera); and (2) obviousness over U.S. Patent Pub. No. 2002/0065869 (Calder) and U.S. Patent No. 7,836,494 (Richardson). Final Written Decision, 2016 WL 67220, at *1.

In its petition, HTC argued that D'Aviera disclosed every element of the claims, relying on D'Aviera's "isolator engine" to disclose the "diverting" and "controlling" limitations. For its obviousness challenge, HTC relied on the "interception module" of Calder as disclosing those limitations.

After the Board instituted the review, CCE, in its Patent Owner Response, argued: "The plain language of independent claims 1 and 24 clearly requires that the claimed 'divert[ing]' limitation is an intervening step that must be performed after a message has been sent from the claimed application program and before the message is received and controlled by the claimed controlling entity." J.A. 495 (alteration in original). CCE further argued that "to meet the claimed 'divert[ing]' step, there

must be something that 'diverts' a message of messages after the message is sent from the application program and before the message is received by the controlling entity." J.A. 501 (alteration in original). CCE contended that that "something" had to be "between the application program 210 and the isolation engine 225 (i.e., the alleged controlling entity)" of D'Aviera, J.A. 500, and "between the application program and the interception module 415 (i.e., the alleged controlling entity)" of Calder, J.A. 508.

In its Reply, HTC treated the central issue presented by CCE's Response as whether, under the '923 patent claims, the same structure could perform both the diverting and controlling functions. See J.A. 567–78. It pointed to authority explaining that different functions can be performed by the same structure, and it argued that the language of the claims did not preclude such a result here. HTC made no argument that claim 1, the independent method claim, differed from claim 24, the independent device claim, in whether it required different structures to perform the diverting and controlling functions.

In the Final Written Decision issued under 35 U.S.C. § 318(a), the Board concluded that the claims required "the diverting and controlling steps in claim 1" to be "performed by separate components" and that the "diverting unit and controlling entity in claim 24" must be "separate components." Final Written Decision, 2016 WL 67220, at *4.2 The Board observed that "[n]either party argues that claim 1 should be treated differently than claim 24 because claim 1 is a method claim." Id. at *4 n.4. Applying that requirement of the claims to the prior art asserted by HTC, the Board determined that HTC had neither shown that "D'Aviera discloses a separate compo-

² As the case comes to us, no separate issue is presented as to the dependent claims; only claims 1 and 24 need be discussed.

nent for the diverting limitation in the challenged claims," id. at *4, nor "identif[ied] separate components in Calder and Richardson for performing the diverting and controlling steps in claim 1, or for the diverting unit and controlling entity in claim 24," id. at *6. The Board therefore rejected HTC's challenges to the patentability of the claims at issue. Id. at *5–6.

HTC appeals under 35 U.S.C. §§ 141(c) and 319. We have jurisdiction under 28 U.S.C. § 1295(a)(4)(A).

II

With one small exception, addressed in section IV, HTC's entire argument to this court rests on its contention that the Board erred, as a matter of claim construction, in ruling that the "diverting" and "controlling" steps must be performed by separate components. Appellants' Br. 20–49. We reject that contention.

As an initial matter, we agree with HTC that the Board's ruling in this regard is a ruling on claim construction. Although the Board stated that "no claim terms require express construction," Final Written Decision, 2016 WL 67220, at *3, the Board engaged in claim construction when it proceeded to determine whether D'Aviera (and Calder) disclose the "diverting" and "controlling" limitations. It specifically concluded that the '923 patent requires those steps to be performed by "separate components," which is a conclusion about the scope of the '923 patent, not the prior art, and which the Board drew using the standard tools of claim construction. *Id.* at *4-5 (citing claim construction cases, addressing the language of the claims, and examining the claims in light of the specification). Despite the heading under which the Board's analysis took place, the Board's ruling about the requirement of separate components was clearly a claim construction: it "establish[ed] the scope and boundaries of the subject matter that is patented." Netword, LLC v. Centraal Corp., 242 F.3d 1347, 1350 (Fed. Cir. 2001); see

Regents of the Univ. of Minn. v. AGA Med. Corp., 717 F.3d 929, 939–40 (Fed. Cir. 2013).

By regulation, the Board, in construing claims in an IPR, must adopt the broadest reasonable interpretation in light of the specification. 37 C.F.R. § 42.100(b); see Cuozzo Speed Techs., LLC v. Lee, 136 S. Ct. 2131, 2142–46 (2016) (upholding regulation). The Board here relied entirely on intrinsic evidence in concluding that the patent claims require separate components for the diverting and controlling functions. Accordingly, we review the construction de novo. Microsoft Corp. v. Proxyconn, Inc., 789 F.3d 1292, 1297 (Fed. Cir. 2015).

We begin with device claim 24 because its language is on its face more informative than the language of claim 1. We agree with the Board that the broadest reasonable construction is one that requires separate components for diverting and for controlling. The strongest evidence for this separation is the claim language itself, which plainly recites two different structures: a "diverting unit" and a "controlling entity." '923 patent, col. 10, lines 62-65. The separate naming of two structures in the claim strongly implies that the named entities are not one and the same structure. See Becton, Dickinson & Co. v. Tyco Healthcare Grp., LP, 616 F.3d 1249, 1254 (Fed. Cir. 2010) ("Where a claim lists elements separately, 'the clear implication of the claim language' is that those elements are 'distinct component[s]' of the patented invention." (alteration in original) (quoting Gaus v. Conair Corp., 363 F.3d 1284, 1288 (Fed. Cir. 2004))).

The specification reinforces the inference that the claimed "diverting unit" and "controlling entity" are separate components. The specification nowhere gives an example of a single structure performing both functions. Instead, the specification consistently describes the "diverting" step as performed by either the "SIP protocol stack" or a "middleware modification module." See '923

patent, col. 4, lines 46-61; id., col. 6, lines 20-26; id., col. 6, lines 49–55 ("The functionality needed in the SIP protocol stack may be introduced as changes made within the protocol stack, as is assumed in the above examples. Alternatively, the functionality may be introduced as a separate middleware modification module that resides between the applications(s) and the protocol stack and which thus also provides an Application Program Interface (API) for the applications."). In contrast, the specification describes the "controlling" step as being performed by a "controlling entity," identified as the "trusted agent," id., col. 2, lines 10-11, which "may be a dedicated software agent or a Digital Rights Management (DRM) agent whose normal functionality has been modified for the method of the invention," id., col. 3, lines 63-66. specification thus describes two possible structures for performing the "diverting" step, both of them distinct from the two possible structures for performing the "controlling" step. The implication of distinctness is further bolstered by the specification's later statement that "[i]n the above examples, it is assumed that the SIP stack (or the middleware modification module) can be changed but the trusted agent offers its services only to a valid SIP stack (or middleware modification module)." Id., col. 7, That statement distinguishes the trusted agent from the SIP stack and middleware module.

Furthermore, the specification repeatedly describes the "trusted entity" as residing in a "tamper resistant area of the terminal." *Id.*, col. 2, lines 3–4; *id.*, col. 3, lines 58–63. Every time the "trusted entity" is shown in a figure, it is shown inside the "tamper resistant area" and separate from the "SIP protocol stack," which is doing the diverting and resides in the "open platform area." *Id.*, figs.2, 6–8. The specification contemplates that the SIP stack might sometimes be in the "tamper resistant area," but speaks of it as a separate entity being wholly moved, not incorporated into the "controlling entity." *Id.*, col. 7,

lines 5–9 ("If the use [of] unauthorized applications is also to be eliminated, the SIP stack must be moved to the tamper-proof area or the possibility to change the SIP stack is to be eliminated otherwise."). For all of these reasons, the only reasonable construction of the claim language, in light of the specification, is that claim 24 assumes separate structures for the "diverting unit" and the "controlling entity."

HTC counters that, in some patents, "a single prior art structure that performs two functions can satisfy two functional Claim elements." Appellants' Br. 14; *id.* at 32–33. But, as HTC's main authority makes explicit, "can satisfy" does not mean "always satisfies"; rather, the claims of any given patent must be evaluated in light of the specification to determine whether their scope requires more than one structure. *In re Kelley*, 305 F.2d 909, 916 (C.C.P.A. 1962). In this case, for the reasons already given, claim 24 requires two structures for the "diverting unit" and the "controlling entity."

Turning to claim 1, the independent method claim, we conclude that HTC has forfeited any argument for a conclusion different from the one we (and the Board) have drawn for claim 24. In this court, HTC separately addressed the language of claims 1 and 24, see Appellants' Br. 22–38, but it made no argument in its briefs that the two claims could support different conclusions regarding whether two structures are required for the diverting and controlling functions. And at oral argument, HTC stated that, while the claims use different language, there is no "meaningful distinction" between claims 1 and 24 for this purpose. Oral Arg. 1:04–1:25, http://oralarguments.

³ HTC makes this argument for both claim 1 and claim 24, even though claim 24 is a device claim, presumably because the structures in claim 24 are recited using functional words.

cafc.uscourts.gov/default.aspx?fl=2016-1858.mp3. That position, moreover, reflects how HTC presented its case to the Board. Even though HTC recognized in its Reply that the central issue was whether a single structure could perform the two functions, and discussed claims 1 and 24 under separate headings, J.A. 567–78, HTC never argued to the Board that it could prevail on claim 1 even if it lost on claim 24, see J.A. 685–66 (HTC arguing to the Board that claims 1 and 24 are "very similar"). The Board so recognized. Final Written Decision, 2016 WL 67220, at *4 n.4. A fortiori, HTC never presented a developed explanation for why the Board could distinguish between those claims with respect to the separate-components requirement. Nor has HTC presented such an argument in this court; indeed, it has asserted that the textual differences are ultimately not meaningful.

In the particular circumstances presented, we will not consider giving claim 1, in the respect at issue, a different scope from that of claim 24, which, we have concluded, requires two separate components for the claimed "diverting" and "controlling." We rely on what HTC has and has not argued in both this court and in the PTO. In this court, HTC stated that there is no meaningful difference between the claims, and presented no explanation for differentiating the claims' scope in the respect that is centrally at issue in this IPR. See SmithKline Beecham Corp. v. Apotex Corp., 439 F.3d 1312, 1319–20 (Fed. Cir. 2006) (treating an argument not meaningfully developed on appeal as waived). In the PTO, HTC did not "fairly put [the Board] on notice as to the substance of any request to distinguish claims 1 and 24 regarding this critical issue of scope. See Nelson v. Adams USA, Inc., 529 U.S. 460, 469 (2000) (explaining that the critical issue regarding preservation for appeal is fair notice in initial tribunal).

In *Interactive Gift Express, Inc. v. CompuServe, Inc.*, 256 F.3d 1323 (Fed. Cir. 2001), this court discussed the preservation of contentions regarding claim construction

for appeal. It explained that presenting a "new claim construction position" that "change[s] the scope of the claim construction" on appeal is generally impermissible, whereas "clarifying or defending the original scope of [a] claim construction" or "supporting [the] existing claim construction position with new citations to the specification" is generally permissible. *Id.* at 1346–47. But the issue of differentiating claim 1's scope from claim 24's scope does not fit neatly into either category. And, as noted, even in this court, HTC has not argued for such differentiation.

Judgment and discretion are involved in assessing whether an argument has been both adequately preserved and adequately developed and whether to overlook deficiencies in either respect. See, e.g., Icon Health & Fitness, Inc. v. Strava, Inc., 849 F.3d 1034, 1040 (Fed. Cir. 2017); SmithKline, 439 F.3d at 1320; Harris Corp. v. Ericsson Inc., 417 F.3d 1241, 1251 (Fed. Cir. 2005); see also 16AA Charles Alan Wright et al., Federal Practice & Procedure § 3974.1 n.36 (4th ed. 2017). Here, we think, the interests in fair notice to the initial tribunal and to the opposing party (both before the Board and in this court) would be ill-served were we now to distinguish claim 1 from claim 24 where HTC never directly argued for such different scopes or explained why it justifiably should win on claim 1 even if it lost on claim 24, and where HTC stated in this court there was no meaningful difference between the Those interests have particular weight in the context before us. It is not plausible that HTC inadvertently overlooked the potential for a half win, which it might well have deliberately chosen to discourage by taking an all-or-nothing approach. Moreover, the IPR regime at issue places a special premium on efficient Board resolution of patentability challenges. U.S.C. §§ 316(a)(11), 318(d); *Cuozzo*, 136 S. Ct. at 2144; H.R. Rep. No. 112-98, pt. 1, at 39-40, 45 (2011), as reprinted in 2011 U.S.C.C.A.N. 67, 69, 75. In these circumstances, we will not decide whether claim 1 should be accorded a different scope from that of claim 24 in the respect at issue.

Other cases involving different circumstances could justify a different judgment. This is not a case in which "the proper resolution is beyond any doubt, or where injustice might otherwise result." Interactive Gift, 256 F.3d at 1344 (quoting Singleton v. Wulff, 428 U.S. 106, 121 (1976)); see also Icon Health, 849 F.3d at 1040. As to the proper resolution, the seemingly relevant considerations are mixed. On one hand, the claims differ in their language: claim 1 makes no mention of a "diverting unit," and we see no reason that a "controlling entity" cannot "divert" a message to itself as a matter of English language alone, putting aside what the context of this particular patent may require. On the other hand, such context cannot be put aside, and claim 1, through its claiming of a "controlling entity," is linked to claim 24, which claims the same "controlling entity," raising a question about whether the common entity could be properly understood as doing more (i.e., diverting) in claim 1 than it does in claim 24. See In re Varma, 816 F.3d 1352, 1363 (Fed. Cir. 2016). Moreover, as we have explained, the specification gives no example of a single-structure embodiment, whether of a device or a method. At least for those reasons, the dissent's view—that this patent is reasonably read to claim a method invention broader (in the respect at issue) than the device version of the invention—is not "beyond any doubt."4

⁴ The Summary of the Invention describes "one embodiment" as the "provision of a method," without specifically calling for two structures, and "another embodiment" as a "terminal," which includes two (functionally defined) structures. '923 patent, col. 2, lines 11–

Nor does this case qualify for the narrow "injustice" exception. HTC bypassed a clear opportunity to present an argument for distinguishing the results as to claim 1 and claim 24, here and before the Board, in circumstances of a type that often involve tactical choices to omit arguments. See Icon Health, 849 F.3d at 1040 (explaining that whether there was an "opportunity to raise the objection" is a factor in overlooking waiver (internal quotation marks omitted)). And we have no basis for thinking that, by not deciding claim 1's scope on the merits, we are resolving "significant questions of general impact or of great public concern." *Id.* (internal quotation marks We have a patent-specific claim-construction issue, not a matter of statutory interpretation. See Teva Pharm. USA, Inc. v. Sandoz, Inc., 135 S. Ct. 831, 840 (2015) (distinguishing claim construction from statutory interpretation regarding breadth of impact). And our conclusion leaves other potential challengers (if not otherwise barred by, e.g., estoppel) free to argue the point on its merits. We therefore adopt the same construction for claim 1 as for claim 24.

III

HTC makes one additional claim-construction argument. It attacks the Board's requirement of separate components as ambiguous and impossible to apply. HTC's point here boils down to an argument that, even if the claims require "separate elements," that requirement is met by any piece of software because, as long as the claims are not specific as to the kind of structure that might be required (such as an application, executable file, library, object code file, etc.), the "structure" may be a

^{31.} HTC has not pointed to that passage and relied on it as distinguishing the method and device claims in the respect at issue.

single instruction, and the "diverting" instruction necessarily will be a "separate" line of code from the "controlling" instruction. Appellants' Br. 43–48.

HTC waived this argument. As its Reply filed in the IPR makes clear, HTC recognized that the central issue was whether the claims required two separate components for the diverting and controlling functions, yet it never argued to the Board that such a requirement was improper because it would be ambiguous, impossible to apply, hollow, or the like, given the nature of software. It argued only that, as a matter of law, the same structure could be relied on to meet two functional claim elements. See J.A. 567–78. And that is all that is said in the one sentence from the Reply that HTC quotes to this court in arguing against waiver: "That such structure [for diverting] might be included in the same 'box' as the controlling entity is irrelevant, so long as the elements of the claim are met." J.A. 571.⁵

IV

HTC makes a final argument to the effect that the Board should have looked at the entirety of certain priorart references for assessing obviousness even if the separate-component requirement was not satisfied by those references. But it does not point to any argument in its petition that certain claim requirements, including the separate-component one, would be obvious in light of prior

⁵ The Board observed that HTC made some suggestion that certain aspects of D'Aviera and Calder met the two-structure requirement, but the Board found HTC's showing insufficient. *Final Written Decision*, 2016 WL 67220, at *5. That is a conclusion about application of the claim construction to the prior art. HTC's argument to this court is entirely about claim construction, not application (with the minor exception noted in section IV).

art even if no prior art disclosed that element. Therefore, this argument is waived.

V

For the foregoing reasons, we affirm the Board's decision that HTC did not carry its burden to show the unpatentability of claims 1, 2, 4, 5, 8, 24, 25, and 31 of the '923 patent.

AFFIRMED

NOTE: This disposition is nonprecedential.

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DYK, Circuit Judge, dissenting-in-part.

Like the majority, I see the ultimate issue here as a matter of claim construction under the broadest reasonable interpretation standard. Maj. Op. 6–7. I agree with the majority with respect to the construction of the device claims, but I respectfully disagree as to the method claims.

Claims 24, 25, and 31 are device claims. Independent claim 24, representative of these device claims, provides for "a diverting unit configured to divert a message" and a "controlling entity . . . configured to control . . . whether the application program behaves in a predetermined manner in the communication terminal." '923 patent, col. 10 l. 62–col. 11 l. 3 (emphases added). The plain language of claim 24 indicates that there is a separate "diverting unit" which "divert[s] a message" to the controlling entity. This reading is reinforced by the specification, which teaches that

the invention provides a terminal for a communication system. The terminal includes one or more applications configured to send messages towards a communication network and diverting means for diverting selected messages sent from an application and destined for the communication network to a controlling entity residing in the terminal, where the controlling entity is configured to control the selected messages before it is to be transmitted to the communication network.

Id. at col. 2 ll. 23–31 (emphases added). Thus, I agree with the majority that "the only reasonable construction of the claim language, in light of the specification, is that claim 24 assumes separate structures for the 'diverting unit' and the 'controlling entity." Maj. Op. 9.

Claims 1, 2, 4, 5 and 8 are method claims, but their language is different. Independent claim 1, representative of these method claims, provides:

A method for controlling application programs in a communication terminal, the method comprising:

sending messages from an application program towards a communication network, the application program residing in a communication terminal;

diverting a message of the messages to a controlling entity residing in the communication terminal; and

based on the message, controlling in the controlling entity whether the application program behaves in a predetermined manner in the communication terminal, the controlling being performed before the message is transmitted from the communication terminal to the communication network.

'923 patent, col. 9 ll. 10–22 (emphasis added).

Thus, the device claims and the method claims do not use the same claim terms. The device claims recite a "diverting unit." In contrast, the method claims merely recite the step of "diverting a message." Even the majority opinion acknowledges this distinction, holding that "claim 1 makes no mention of a 'diverting unit." Maj. Op. 12.

This significant difference in claim language contradicts the Board's rationale that the method claims require a separate diverting unit, such "that the diverting step is performed by something other than the controlling entity." J.A. 9. The plain meaning of "divert" is "to turn from one course, direction, objective, or use to another." Webster's Third New International Dictionary 663 (2002). In the context of Claim 1's language—"diverting a message of the messages to a controlling entity"—the verb "divert" is acting on the noun "message," which was on its way to the network, but is now "turn[ed] from [that] course, direction . . . to another," namely, to the controlling entity. From this plain meaning of the "diverting" step, I see nothing that confines what is doing the diverting. Indeed, even the majority concedes that "we see no reason that a

'controlling entity' cannot 'divert' a message to itself," Maj. Op. 12, and that the language of "claim 24... is on its face more informative than the language of claim 1," because "separation is [in] the claim language itself," Maj. Op. at 7. Under the broadest reasonable interpretation, therefore, claim 1 cannot be read to require a separate diverting unit or component that performs the diverting.

The specification also does not support the Board's construction of the method claims. The specification discusses these method claims in only one relevant passage:

[O]ne embodiment of the invention is the provision of a method for controlling applications in a communication terminal. The method includes the steps of sending messages from an application towards a communication network, . . . and diverting at least one message destined for the communication network to a controlling entity residing in the communication terminal. The method also includes controlling, in the controlling entity, the at least one message diverted to it before being transmitted from the communication terminal to the communication network.

'923 patent, col. 2 ll. 11–22 (emphasis added). There is no suggestion from this passage that the diverting "step" requires a separate component. Therefore, I believe the Board erred in concluding that "[t]he specification of the '923 patent *confirms* that the diverting and controlling steps of claim 1 are performed by separate components." J.A. 9 (emphasis added). In fact, all of the disclosures that the Board cites that correspond to a separate diverting unit pertain only to the device claims. *See* J.A. 9–10 (citing to embodiments described in figures 2 and 6–8); '923 patent, col. 3 ll. 10–11, 20–23 (figures 2 and 6–8 are device embodiments).

Finally, I disagree that the inventive purpose behind the '923 patent suggests a different construction of the method claims. The inventive concept here is only to "efficiently control the behavior of applications residing in a terminal ... [using] a separate controlling entity." '923 patent, col. 1 ll. 54-60. This purpose can be met without requiring a separate diverting component. Board erred in elevating a secondary purpose of the patent to all of the claims. That purpose is having "[t]he controlling entity reside[] in a tamper resistant area[,]... so that its operation cannot be affected by the user or other parties that are beyond the control of the network operator." '923 patent, col. 2 ll. 3-6; Maj. Op. 2-3. This secondary purpose is the subject of dependent claim 26, which is not on appeal and not part of the IPR petition. Claim 26 provides a "terminal according to [device] claim 24, wherein the controlling entity is configured to reside in a tamper resistant area of the terminal." '923 patent, col. 11 ll. 10–12. Thus, Figures 2, 6, 7, and 8 of the specification, which have a separate diverting unit outside of the tamper resistant area where the controlling entity resides, '923 patent, col. 2 l. 59, col. 5 l. 33, col. 5 l. 58, relate only to dependent claim 26.

In summary, to read the method claims as requiring a separate diverting entity would not be "interpret[ing] [the claims] as broadly as their terms reasonably allow" under the proper broadest reasonable interpretation standard. *In re Zletz*, 893 F.2d 319, 321 (Fed. Cir. 1989). The Board thus erred in its construction of the method claims.

Π

The majority does not reach the question of whether the device claims and the method claims should be construed differently. The majority holds that all of the claims must be construed in the same way because "HTC has forfeited any argument ... that the two [sets of] claims could support different conclusions regarding whether two structures are required for the diverting and controlling functions." Maj. Op. 9. In the majority's view, because "HTC never presented a developed explanation for why the Board could distinguish between those [sets of] claims with respect to the separate-components requirement," this court should "not consider giving claim 1 . . . a different scope from that of claim 24." Maj. Op. 10. In my view, the majority's forfeiture holding is both incorrect and troubling for future cases.

This is not a situation in which the appellant had failed to argue separately the method and the device claims. HTC had consistently presented separate arguments with respect to the method claims and the device claims throughout the proceedings. See, e.g., J.A. 569–77; Appellant Br. 22–38.1 For example, in its IPR petition to the Board, HTC presented a detailed claim chart and specific disclosures found in the Calder and Richardson prior-art references that, in its view, made each limitation obvious for each claim at issue; in particular, HTC presented a different set of disclosures found in the prior art with respect to claim 1's diverting limitation than to claim 24's diverting limitation. Compare Petition for Inter Partes Review at 47, IPR2014-01133 (P.T.A.B. July 10, 2014), Paper No. 1, with id. at 51. In another example, in the Petitioner's Reply to the Board, HTC argued that "CCE's statement that ... D'Aviera does not disclose anything . . . that could perform the intervening diverting step is misguided. The language of claim 1 does not preclude the same structure from performing the diverting step and the controlling step." J.A. 570–71 (emphasis added) (quotation marks, citation, and alteration omit-

¹ The majority acknowledges that "HTC separately addressed the language of claims 1 and 24" to our court. Maj. Op. 9.

ted).² And significantly, in its Final Written Decision, the Board also addressed claim 1 and claim 24 separately. *See* J.A. 8–9.

Nor is this a situation where HTC proposes a new claim construction on appeal or where we must adopt a new construction of the method claims in order to rule in the appellant's favor. There is no dispute here that HTC consistently argued below and on appeal that the method claims do not require a separate diverting entity. e.g., J.A. 571 ("The language of claim 1 does not preclude the same structure from performing the diverting step and the controlling step."); Appellant Br. 23 ("The text of Claim 1 does not expressly or implicitly require separate structures to perform the 'diverting' and 'controlling' steps."). Thus, this is not a situation where HTC simply waived its claim invalidity argument with respect to the method claims. Contrary to the majority, I see HTC's consistent, separate presentation with respect to claim 1 and claim 24 and HTC's reliance on the same argument that it had presented to the Board as sufficient to provide "fair notice to the initial tribunal and to the opposing party." Maj. Op. 11.

This is simply a situation in which the appellant has made a single and overly broad argument—that a separate diverting unit is not required—for both the method claims and the device claims. In my view, this argument is correct as to the method claims and incorrect as to the device claims. Under these circumstances, I see no forfeiture. In similar circumstances in the past, we have held that the appellant wins in part and loses in part. *See*,

² In contrast, with respect to claim 24, HTC argued that "D'Aviera unequivocally discloses *a diverting unit*... as required by claim 24.... Isolator engine 225 ... qualifies as ... the requisite diverting unit." J.A. 572–73 (emphasis added) (quotation marks omitted).

e.g., Perricone v. Medicis Pharm. Corp., 432 F.3d 1368, 1379 (Fed. Cir. 2005) (holding that a prior-art reference anticipated claims 1-4 and 7, but not claims 8, 9, and 13, because the latter set of claims contained one fewer limitation); Ecolochem, Inc. v. S. Cal. Edison Co., 227 F.3d 1361, 1370 (Fed. Cir. 2000) (holding that a prior-art reference did not anticipate claims 1, 4, and 7–12, but that it did anticipate claim 20); Raytheon Co. v. Roper Corp., 724 F.2d 951, 957 (Fed. Cir. 1983) (holding that the argument that an additional limitation be read into claims 1, 3, and 4 was only correct with respect to claim 1, and thus, only claim 1 was invalid). And the same approach is appropriate both in district courts and in PTO proceedings. I disagree with the majority that the IPR regime somehow adopts an all-or-nothing approach that discourages such "half wins." See Maj. Op. 11.

The Supreme Court follows a similar approach to statutory interpretation, making clear that when a party "interprets a ... statute too broadly ... or too narrowly ..., a court has an obligation to correct its error." Abramski v. United States, 134 S. Ct. 2259, 2274 (2014). The issue here is similar to that in Young v. United Parcel Service, Inc., 135 S. Ct. 1338 (2015), where the petitioner asked the Court "to interpret the second clause [of the Pregnancy Discrimination Act broadly, ... [so] that the statute grants pregnant workers a 'most-favored-nation' status." Id. at 1349. According to the petitioner's interpretation, "[a]s long as an employer provides one or two workers with an accommodation ...[,] then it must provide similar accommodations to all pregnant workers ..., irrespective of the nature of their jobs, ... their ages, or any other criteria." Id. at 1349-50. The Court held that the petitioners' "approach . . . proves too much." Id. at 1349. Instead, the Court adopted a narrower interpretation under which an employer needs only to accommodate pregnant workers as it "accommodate[s] others 'similar in their ability or inability to work." Id. at 1354. As *Young* demonstrates, partial success is a routine feature of statutory interpretation. Making an overbroad argument routinely leads to partial success, not complete failure.

A party asserting a patent validity challenge under a single theory similarly may lose with respect to some claims but win with respect to others. I respectfully dissent in part from the majority's contrary approach.