NOTE: This disposition is nonprecedential.

# United States Court of Appeals for the Federal Circuit

IN RE: APPLE INC., Appellant

2016 - 1402

Appeal from the United States Patent and Trademark Office, Patent Trial and Appeal Board in No. 90/012,332.

Decided: April 14, 2017

WILLIAM F. LEE, Wilmer Cutler Pickering Hale and Dorr LLP, Boston, MA, argued for appellant. Also represented by SYDENHAM B. ALEXANDER III, LAUREN B. FLETCHER, SARAH R. FRAZIER, DOMINIC E. MASSA; RACHEL KREVANS, NATHANIEL BRYAN SABRI, Morrison & Foerster LLP, San Francisco, CA.

ROBERT J. MCMANUS, Office of the Solicitor, United States Patent and Trademark Office, Alexandria, VA, argued for appellee Michelle K. Lee. Also represented by NATHAN K. KELLEY, THOMAS W. KRAUSE, FRANCES LYNCH, SCOTT WEIDENFELLER.

KATHLEEN M. SULLIVAN, Quinn Emanuel Urquhart & Sullivan, LLP, New York, NY, for amici curiae Samsung Electronics Co., Ltd., Samsung Electronics America, Inc. Also represented by WILLIAM ADAMS; VICTORIA FISHMAN MAROULIS, Redwood Shores, CA.

# Before PROST, *Chief Judge*, DYK and STOLL, *Circuit Judges*.

#### STOLL, Circuit Judge.

Apple appeals the Patent Trial and Appeal Board's decision rejecting all claims of its patent in a reexamination proceeding. Apple contends that the Board erred by construing the "scroll or gesture" and "rubberbanding" limitations too broadly. We agree with Apple on the latter, but not the former. Accordingly, we affirm-in-part, vacate-in-part, and remand for further proceedings consistent with this opinion.

### BACKGROUND

of U.S. Apple Inc. is the assignee Patent No. 7.844,915, which claims software that allows a touchscreen device to differentiate between a scroll operation and a gesture operation based on the number of detected input points-i.e., finger touches. See '915 patent col. 23 ll. 16–41. For example, the '915 patent teaches that a single input point is interpreted as a scroll, whereas two or more input points are interpreted as a gesture. Id. at col. 6 ll. 39-43. Gestures may include zooming in, zooming out, or rotating an image on the screen. Id. at col. 5 ll. 42-48. Claim 1 recites a method that invokes the "scroll or gesture" limitation in dispute in this case:

1. A machine implemented method for scrolling on a touch-sensitive display of a device comprising:

receiving a user input, the user input is one or more input points applied to the touch-sensitive display that is integrated with the device;

creating an event object in response to the user input;

determining whether the event object invokes a scroll or gesture operation by distinguishing between a single input point applied to the touch-sensitive display that is interpreted as the scroll operation and two or more input points applied to the touch-sensitive display that are interpreted as the gesture operation;

issuing at least one scroll or gesture call based on invoking the scroll or gesture operation;

responding to at least one scroll call, if issued, by scrolling a window having a view associated with the event object based on an amount of a scroll with the scroll stopped at a predetermined position in relation to the user input; and

responding to at least one gesture call, if issued, by scaling the view associated with the event object based on receiving the two or more input points in the form of the user input.

*Id.* at col. 23 ll. 16–41 (emphases added). Independent claims 8 and 15 recite a machine readable storage medium and an apparatus, respectively, that contain the same limitation. All other claims in the '915 patent depend from either claim 1, 8, or 15.

The '915 patent also describes an improved scrolling feature called "rubberbanding." When a user scrolls past the edge of the content on the screen, a predetermined amount of blank space is displayed and then the content slides back to fit on the screen, resembling the motion of a taut rubber band when the tension is released from one end. For example, if a user scrolls too far such that no content remains in the direction of the scroll—i.e., a user scrolls down when the screen is already displaying the most recent email at the top—the phone will show a predetermined amount of blank space above the most recent email and will slide the content back onto the screen at the end of the scroll. *Id.* at col. 7 ll. 59–67, col. 8 l. 61 – col. 9 l. 60; *see also id.* Figs. 6A–6D. Claim 2 recites rubberbanding:

2. The method as in claim 1, further comprising:

rubberbanding a scrolling region displayed within the window by a predetermined maximum displacement when the scrolling region exceeds a window edge based on the scroll.

*Id.* at col. 23 ll. 42–46. Dependent claims 9 and 16 contain similar limitations.

An unidentified third party filed a request for ex parte reexamination of all claims of the '915 patent, and the U.S. Patent and Trademark Office granted the request. Based on its constructions of the scroll or gesture and rubberbanding limitations, the Examiner rejected every claim of the '915 patent as anticipated or obvious in view of the prior art, and the Board affirmed. *Ex Parte Apple, Inc.*, No. 2014-007899, 2014 WL 7171965, at \*7 (PTAB Dec. 9, 2014) ("Board Decision"). The Board granted Apple's Request for Rehearing but declined to modify its decision. *Ex Parte Apple, Inc.*, No. 2014-007899, 2015 WL 5676869, at \*4 (PTAB Sept. 24, 2015) ("*Rehearing Decision*"). Apple timely appealed the Board's decision. We have jurisdiction pursuant to 35 U.S.C. § 141(a) and 28 U.S.C. § 1295(a)(4)(A).

#### DISCUSSION

Both of Apple's arguments on appeal are rooted in claim construction. "[W]e review the Board's ultimate claim constructions de novo and its underlying factual determinations involving extrinsic evidence for substan-Prolitec, Inc. v. Scentair Techs., Inc., tial evidence." 807 F.3d 1353, 1358 (Fed. Cir. 2015) (citing Teva Pharm. U.S.A., Inc. v. Sandoz, Inc., 135 S. Ct. 831, 841-42 (2015)). Here, "because the intrinsic record fully determines the proper construction, we review the Board's claim constructions de novo." Microsoft Corp. v. Proxyconn, Inc., 789 F.3d 1292, 1297 (Fed. Cir. 2015). Claims receive the broadest reasonable interpretation consistent with the specification during reexamination proceedings. In re Man Mach. Interface Techs. LLC, 822 F.3d 1282, 1286 (Fed. Cir. 2016). "While the Board must give the terms their broadest reasonable construction, the construction cannot be divorced from the specification and the record evidence." In re NTP, Inc., 654 F.3d 1279, 1288 (Fed. Cir. 2011).

I.

First, Apple contends that the Board's construction of the phrase "two or more" in the scroll or gesture limitation is unreasonable in light of the claim structure and specification. According to Apple, the '915 patent articulates a single rule for distinguishing between two categories of operations: 1) a "single" input point that is interpreted as a scroll operation; and 2) "two or more" input points that are interpreted as a gesture operation. Apple claims that the "or" in the phrase "two or more" does not create a distinction between two input points and more than two input points. In other words, the phrase "two or more" must be interpreted as an atomic unit, meaning that two-, three-, four-, and five-input points must *all* be interpreted as gestures. Noting that the Board is required to apply the broadest reasonable interpretation in light of the specification, Apple points out that the specification consistently refers to gestures as requiring "two or more" input points or a "plurality" of input points. *See, e.g.*, '915 patent col. 1 ll. 45–46, col. 5 ll. 42–48, col. 7 ll. 4–8.

In reaching a contrary conclusion, the Board explained that the broadest reasonable interpretation of the phrase "two or more" permits either two input points or more than two input points to be interpreted as a gesture Board Decision, 2014 WL 7171965, at \*4; operation. *Rehearing Decision*, 2015 WL 5676869, at \*1. Stated differently, the Board held that the claim language only requires detection of a scroll operation in response to a single input point and a gesture operation in response to one of the possible multi-input touches. Because the prior art relied on by the patent examiner-including JP 2000-163031 to Nomura and U.S. Patent No. 7,724,242 to Hillis—both teach a single-input scroll and a two-input gesture, J.A. 409, ¶¶ 53-56; '242 patent col. 3 ll. 46-49, col. 8 ll. 44-48, the Board rejected the claims. Board Decision, 2014 WL 7171965, at \*4.

We agree with the Board's construction. The pertinent claim language recites: "distinguishing between a single input point . . . and two or more input points." '915 patent col. 23 ll. 25–28 (emphasis added). On its face, this language does not limit the invention such that all received user inputs must be categorized as either a scroll or a gesture as Apple contends. Apple's construction would replace the word "or" with "and," thereby requiring all multi-input touches to be distinguished as gestures. But this reading is too narrow. The broadest reasonable interpretation of the word "or" in the phrase "two or more" creates alternatives for the gesture operation: a gesture operation occurs if either two input points or more than

two input points are detected. We additionally note that the claims use the open-ended transitional phrase "comprising" and, thus, the claims are broad enough to include user inputs that are categorized as something other than a scroll or a gesture, undermining Apple's suggestion that the claims are limited to a single rule. And the claim language is broad enough to read on prior art, such as Nomura and Hillis, that distinguishes between a single input point and two input points, regardless of how three-, four-, or five-input points are interpreted.

Apple's reliance on the specification is also unavail-Although the specification does describe a gesture ing. operation in the context of "two or more" or a "plurality" of input points or touches, it does not define "two or more" or "plurality" as meaning that all of the possible pluralities (e.g., two-, three-, four-, and five-input touches) must be interpreted as a gesture. Apple's brief touts the invention disclosed in the specification as a single rule that distinguishes all user inputs as either a scroll or a gesture. Apple states: "The '915 patent does not describe any category of user input other than a scroll or a gesture; every user input is determined to be in one of those two categories." Appellant Br. 9. But the specification does not bear out Apple's reading. In describing Figure 1, for example, the specification suggests that other user inputs are possible, explaining that "user input may be in the form of an input key, button, wheel, touch, or other means for interacting with the device." '915 patent col. 6 ll. 34-36. Moreover, the specification describes methods other than a single rule to distinguish scrolls from gestures. For example, the specification discloses that, "[i]n certain embodiments, determining whether the event object invokes a scroll or gesture operation is based on receiving a drag user input for a certain time period." Id. at col. 6 11. 43–46. Contrary to the description of the patent in Apple's brief, Apple's specification does not emphasize the importance of the single rule Apple now wants its claims

to cover. Nor does the specification expressly or implicitly define the term "two or more" beyond its ordinary meaning such that the claims should be interpreted to require a single rule that identifies and separates all inputs as either scrolls (by detecting one-touch) or gestures (by detecting all other multi-input touches).

As the Board recognized, this claim language is properly construed under the BRI as distinguishing between a single input touch and any multi-input touch. Accordingly, we discern no error in the Board's construction of "two or more" under the broadest reasonable interpretation.

### II.

Apple next faults the Board for adopting the Examiner's interpretation of "rubberbanding" as covering sliding content forward at the end of a scroll (i.e., sliding in the same direction as the scroll). Based on this construction, the Board rejected claims 2, 9, and 16—which include the rubberbanding limitation—as obvious in view of WO 03/081458 to Lira in combination with Hillis or other prior art of record. Apple contends the Board erred in its claim construction because rubberbanding requires sliding the content backwards in the opposite direction of the scroll.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> As an initial matter, we disagree with the Board's conclusion that Apple waived its argument that rubberbanding requires sliding the displayed content backwards. *Rehearing Decision*, 2015 WL 5676869, at \*3. Apple raised this argument in its Patent Owner's Appeal Brief when it contended that "Lira teaches that the screen should 'snap' to the next region of content" and therefore achieved "the opposite effect from rubberbanding." J.A. 798–99.

Lira discloses a method for scrolling within a column of content on a small display screen that relies on a "userdefined snap threshold" to determine whether to stay on the current column of text or move horizontally to the next column. J.A. 477. If the user's horizontal scroll does not exceed the threshold, indicating an intent to stay on the current column, that column is centered on the display screen at the end of the scroll. If, however, the user's scroll exceeds the threshold, the adjacent column in the direction of the scroll is "snapped" into view, i.e., the content slides forward to display the next column. *Id*.

The Examiner appears to have construed rubberbanding in a circular manner to require "rubberbanding a scrolled region by a predetermined maximum displacement when the scrolled region exceeds a display edge." J.A. 843 (quoting '915 patent col. 5 ll. 35–40). The PTO argues on appeal that the broadest reasonable interpretation of rubberbanding is not limited to sliding content in a particular direction, much less requiring that the content must slide backwards, and that the concept of rubberbanding "simply seeks to control the movement of scrolled content." Appellee Br. 49. Because the Board's construction did not limit rubberbanding to sliding content backwards, it found that Lira disclosed this limitation.

We agree with Apple that the Board's analysis rests on an incorrect interpretation of rubberbanding. As expressly defined in the specification, the key to the rubberbanding feature is sliding content in the opposite direction of the scroll—sliding content backwards—once the scroll has been completed. Acting as lexicographers, the inventors of the '915 patent expressly defined rubberbanding in the specification as follows:

Rubberbanding a scrolled region according to the method 300 occurs by a predetermined maximum displacement value when the scrolled region exceeds a display edge of a display device based on a scroll. If a user scrolls content of the display making a region past the edge of the content visible in the display, then the displacement value limits the maximum amount for the region outside the content. At the end of the scroll, the *content slides back* making the region outside of the content no longer visible on the display.

'915 patent col. 7 ll. 59–67 (emphasis added); see also id. at col. 9 ll. 10–46; Figs. 6A–6D. As this portion of the specification makes clear, rubberbanding requires the content to slide backwards at the end of a scroll. The term "rubberbanding," as defined by the inventors, does not cover sliding content forward at the end of the scroll, and the Examiner did not cite any evidence to support the proposition that selecting the direction of the scrolling would be within the level of ordinary skill. Because the Board misinterpreted the rubberbanding limitation, we vacate its rejection of claims 2, 9, and 16, and remand for the Board to reconsider these claims in light of the proper interpretation of rubberbanding.<sup>2</sup>

#### CONCLUSION

We have considered the parties' remaining arguments and find them unpersuasive. The Board correctly construed the scroll or gesture limitation but erred in its construction of the rubberbanding limitation. Therefore, the Board's decision is affirmed-in-part, vacated-in-part, and remanded for further proceedings consistent with this opinion.

<sup>&</sup>lt;sup>2</sup> On remand, the Board should also consider Lira's disclosure that the "column is re-centered and snapped back" into alignment with the display window when "the user's scrolling does not exceed the threshold," as identified in the Examiner's Answer. J.A. 844.

# AFFIRMED-IN-PART, VACATED-IN-PART, AND REMANDED

COSTS

Each party shall bear its own costs.