

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* I-JONG LIN

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Appeal 2008-3154  
Application 10/180,743  
Technology Center 2800

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Decided: September 9, 2008

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Before KENNETH W. HAIRSTON, JOSEPH F. RUGGIERO,  
and SCOTT R. BOALICK, *Administrative Patent Judges*.

RUGGIERO, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant appeals under 35 U.S.C. § 134 from the Examiner's rejection of claims 1-3 and 5-34. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm-in-part.

Appellant's invention relates to the detection of a light point projected on a computer controlled displayed image. The light point is projected at the displayed image while a notification signal indicating that the light point is being projected is simultaneously transmitted to a controller. The detectability of the light point is increased by the adjustment of at least one of the image capture and display parameters by the controller within a predetermined time after receipt of the notification signal (Spec. ¶ 0009).

Claim 1 is illustrative of the invention and reads as follows:

1. A system including a computer system for controlling and generating image data for displaying an image, the system comprising:

a device for projecting a light point at the displayed image while at essentially the same time transmitting a notification signal indicating the light point is being projected;

a controller for adjusting at least one of image capture and image display parameters so as to increase detectability of the projected light point upon the displayed image for a predetermined interval of time after receipt of the notification signal;

a device for capturing image data including the displayed image and the projected point upon the displayed image within the predetermined time interval;

a analyzer for detecting the projected point within the captured image data dependent on the adjusted parameters.

The Examiner's Answer cites the following prior art references:

Hasegawa	US 2002/0015137 A1	Feb. 7, 2002
Kitazawa	US 6,454,419 B2	Sep. 24, 2002 (filed Mar. 19, 2001)
Chen	US 6,803,907 B2	Oct. 12, 2004 (filed Oct. 4, 2001)

Claims 1-3, 5-7, 9-14, 16-22, and 25-30 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Chen.

Claims 8, 15, 23, and 24 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Chen in view of Hasegawa.<sup>1</sup>

Claims 31-34 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Chen in view of Kitazawa.

Rather than reiterate the arguments of Appellant and the Examiner, reference is made to the Briefs and Answer for the respective details. Only those arguments actually made by Appellant have been considered in this decision. Arguments which Appellant could have made but chose not to make in the Briefs have not been considered and are deemed to be waived [see 37 C.F.R. § 41.37(c)(1)(vii)].

## ISSUES

- (i) Under 35 U.S.C. § 102(e), does Chen have a disclosure which anticipates the invention set forth in claims 1-3, 5-7, 9-14, 16-22, and 25-30?

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<sup>1</sup> Although Appellant did not include dependent claim 23 in the claims appendix (App. Br. 22), we have treated claim 23 as a rejected claim since it is included in the body of the Examiner's rejection in both the Office action mailed September 22, 2005 (page 6) as well as the Examiner's Answer (page 7).

- (ii) Under 35 U.S.C. § 103(a), with respect to appealed claims 8, 15, 23, and 24, would one of ordinary skill in the art at the time of the invention have found it obvious to combine Chen with Hasegawa to render the claimed invention unpatentable?
- (iii) Under 35 U.S.C. § 103(a), with respect to appealed claims 31-34, would one of ordinary skill in the art at the time of the invention have found it obvious to combine Chen with Kitazawa to render the claimed invention unpatentable?

## PRINCIPLES OF LAW

### 1. ANTICIPATION

It is axiomatic that anticipation of a claim under § 102 can be found if the prior art reference discloses every element of the claim. *See In re King*, 801 F.2d 1324, 1326 (Fed. Cir. 1986) and *Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 1458 (Fed. Cir. 1984).

In rejecting claims under 35 U.S.C. § 102, a single prior art reference that discloses, either expressly or inherently, each limitation of a claim invalidates that claim by anticipation. *Perricone v. Medicis Pharmaceutical Corp.*, 432 F.3d 1368, 1375-76 (Fed. Cir. 2005), citing *Minn. Mining & Mfg. Co. v. Johnson & Johnson Orthopaedics, Inc.*, 976 F.2d 1559, 1565 (Fed. Cir. 1992). Anticipation of a patent claim requires a finding that the claim at issue “reads on” a prior art reference. *Atlas Powder Co. v. IRECO, Inc.*, 190 F.3d 1342, 1346 (Fed Cir. 1999) (“In other words, if granting patent protection on the disputed claim would allow the patentee to exclude the public from practicing the prior art, then that claim is anticipated, regardless

of whether it also covers subject matter not in the prior art.”) (internal citations omitted).

## 2. OBVIOUSNESS

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the Examiner to establish a factual basis to support the legal conclusion of obviousness. *See In re Fine*, 837 F.2d 1071, 1073 (Fed. Cir. 1988). In so doing, the Examiner must make the factual determinations set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 17 (1966). “[T]he examiner bears the initial burden, on review of the prior art or on any other ground, of presenting a *prima facie* case of unpatentability.” *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992). Furthermore,

“‘. . . there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness’ . . . [H]owever, the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.”

*KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1741 (2007) (quoting *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)).

## ANALYSIS

### 35 U.S.C. § 102(e) REJECTION

#### *Claims 1-3, 5-7, 9, and 27-30*

With respect to the 35 U.S.C. § 102(e) rejection of independent claims 1 and 27 based on the teachings of Chen, the Examiner indicates (Ans. 3-4) how the various limitations are read on the disclosure of Chen. In particular,

the Examiner directs attention to the illustration in Figure 2 of Chen as well as the accompanying description beginning at column 3, line 43 of Chen. Appellant's arguments in response assert that the Examiner has not shown how each of the claimed features is present in the disclosure of Chen so as to establish a prima facie case of anticipation.

After reviewing the Chen reference in light of the arguments of record, we are in general agreement with Appellant's position as stated in the Briefs. At the outset, however, we note that we do not agree with Appellant's contention that the Examiner erred in interpreting the Chen reference as providing a disclosure of transmitting a notification signal indicating that a light point is being projected at a displayed image. According to Appellant (App. Br. 16-17; Reply Br. 2-3), the transmission of the control signal by the cursor button set 330 in the beam pen 30 of Chen, which the Examiner likens to the claimed "notification signal," occurs only "randomly and at the whim of the user," and not at essentially the same time that the beam point is being projected as presently claimed.

Aside from the fact that the claim language "essentially the same time" is relative terminology, as pointed out by the Examiner (Ans. 10), we agree with the Examiner that the language of independent claims 1 and 27 requires only that, at some point during the projection of the light point at the displayed image in Chen, a notification signal is simultaneously transmitted. As explained by the Examiner (*id.*), this takes place when the user presses the mouse cursor button 330 of the beam pen 30 while the light point is projected on to the display screen 20.

We do agree with Appellant, however, that the Examiner erred in finding that the Chen reference discloses the adjustment of image display

parameters to increase the detectability of the projected light spot as set forth in each of independent claims 1 and 27. In addressing this claimed feature, the Examiner has taken the position (Ans. 4 and 11) that, since the notebook computer CPU in Chen is not aware of the projected light spot until the notification signal is sent from the beam pen, the CPU's detectability of the light point will be increased once it receives the notification signal and then functions to adjust parameters of the displayed image.

We do not find, however, any basis in the disclosure of Chen to support the Examiner's position. Contrary to the Examiner's contention, Chen discloses that the notebook computer CPU is aware of the position of the light point at all times since it is the CPU 110 that operates to move the cursor to the detected light point position (Chen, col. 3, ll. 25-31). In other words, since the CPU 110 is aware of the position of the light point before the notification signal is sent, it does not function to increase detectability of the light point "for a predetermined interval of time after receipt of the notification signal" as claimed.

In view of the above discussion, since all of the claim limitations are not present in the disclosure of Chen, we do not sustain the Examiner's 35 U.S.C. § 102(e) rejection of appealed independent claims 1 and 27, nor of claims 2, 3, 5-7, 9, and 28-30 dependent thereon.

*Claims 10-14, 16-22, 25, and 26*

Although we found Appellant's arguments persuasive in convincing us of error in the Examiner's 35 U.S.C. § 102(e) rejection of claims 1-3, 5-7, 9, and 27-30, we reach the opposite conclusion with respect to the rejection of independent claims 10 and 18, and their respective dependent claims 11-

14, 16, 17, 19-22, 25, and 26. We note that, unlike previously discussed independent claims 1 and 27, independent claims 10 and 18 include no limitations directed to the increasing of projected light point detectability by adjusting display parameters. In fact, independent claims 10 and 18 merely require the transmission of a light signal projection notification signal simultaneously with the projection of the light point on a computer controlled displayed image.

We refer to our earlier discussion in which we found that the Examiner did not error in finding that, during the projection of the light point at the displayed image in Chen, a notification signal is simultaneously transmitted by a user pressing the mouse cursor button 330 of the beam pen 30 while the light point is projected onto the display screen 20. Although Appellant argues (Reply Br. 2-3) that the Examiner's position is in error since Chen never refers to the signal transmitted by the beam pen 30 to the notebook computer as a "notification" signal, we would point out that anticipation "is not an 'ipsissimis verbis' test." *In re Bond*, 910 F.2d 831, 832-33 (Fed. Cir. 1990) (citing *Akzo N.V. v. United States Int'l Trade Comm'n*, 808 F.2d 1471, 1479 n.11 (Fed. Cir. 1986)). "An anticipatory reference . . . need not duplicate word for word what is in the claims." *Standard Havens Prods. v. Gencor Indus.*, 953 F.2d 1360, 1369 (Fed. Cir. 1991).

We further find to be without merit Appellant's attempt to draw a distinction between the claimed notification signal and the control signal transmitted by the beam pen 30 of Chen. According to Appellant (Reply Br. 3), a notification signal is one which informs a controller of a particular event such as the projection of a light point. In our view, however, this is

precisely what occurs in Chen, i.e., the transmitted beam pen control signal is a notification signal since it is informative of the light point projection, without which projection no control signal would be transmitted.

For all of the above reasons, since all of the claim limitations are present in the disclosure of Chen, we sustain the Examiner's 35 U.S.C. § 102(e) rejection of appealed independent claims 10 and 18, as well as dependent claims 11-14, 16, 17, 19-22, 25, and 26 not separately argued by Appellant.

### 35 U.S.C. § 103(a) REJECTIONS

*The rejection of dependent claims 8, 15, 23, and 24 based on Chen in view of Hasegawa*

The rejection of claim 8 is not sustained. The Examiner has added the teachings of Hasegawa to Chen to address the infrared signal feature of dependent claim 8. Although we find no error in the Examiner's articulated basis (Ans. 6) for combining Hasegawa and Chen, we find nothing in the disclosure of Hasegawa which overcomes the innate deficiencies of Chen in disclosing the claimed invention as set forth in base claim 1.

We do sustain the rejection of dependent claims 15, 23, and 24. Appellant has provided no separate arguments for the patentability of these claims but, rather, has relied upon arguments previously made with respect to independent base claims 10 and 18, which arguments we found to be unpersuasive as discussed *supra*.

*The rejection of dependent claims 31-34 based on Chen in view of Kitazawa*

This rejection is not sustained. The Examiner has added the teachings of Kitazawa to Chen to address the image resolution features of dependent claim 31-34. As with the previously discussed rejection based on the combination of Chen and Hasegawa, although we find no error in the Examiner's articulated basis (Ans. 7-8) for combining Kitazawa and Chen, we find nothing in the disclosure of Kitazawa which overcomes the innate deficiencies of Chen in disclosing the claimed invention as set forth in base independent claim 27.

CONCLUSION

In summary, with respect to the Examiner's 35 U.S.C. § 102(e) rejections of appealed claims 1-3, 5-7, 9-14, 16-22, and 25-30, we have not sustained the rejection of claims 1-3, 5-7, 9, and 27-30, but have sustained the rejection of claims 10-14, 16-22, 25, and 26. With respect to the Examiner's 35 U.S.C. § 103(a) rejections of appealed claims 8, 15, 23, 24, and 31-34, we have not sustained the rejections of claims 8 and 31-34, but have sustained the rejection of claims 15, 23, and 24. Accordingly, the Examiner's decision rejecting appealed claims 1-3 and 5-34 is affirmed-in-part.

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No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv)(effective September 13, 2004).

AFFIRMED-IN-PART

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