UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/668,215	03/25/2015	Jonathan Lenchner	YOR920140547US1	2695

48062 7590 01/23/2020

RYAN, MASON & LEWIS, LLP
2425 Post Road
Suite 204
Southport, CT 06890

EXAMINER
BARAKAT, MOHAMED

ART UNIT	PAPER NUMBER
2689	

NOTIFICATION DATE	DELIVERY MODE
01/23/2020	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ctoffice@rml-law.com
kmm@rml-law.com
mjc@rml-law.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JONATHAN LENCHNER, JOHN C. NELSON, and TIMO JUHANI SANTALA

Appeal 2018-008731
Application 14/668,215
Technology Center 2600

Before ALLEN R. MacDONALD, SCOTT RAEVSKY, and IFTIKHAR AHMED, *Administrative Patent Judges*.

MacDONALD, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant[1] appeals from the Examiner's decision to reject claims 10–13, 15–19, and 21–25. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

---

[1] We use the word Appellant to refer to "applicant" as defined in 37 C.F.R. § 1.42(a). Appellant identifies the real party-in-interest as International Business Machines Corporation. Appeal Br. 1.

CLAIMED SUBJECT MATTER

Claim 16 is illustrative of the claimed subject matter (emphasis, formatting, and bracketed material added):

16. A system for localizing a source of a set of radio signals, said system comprising:

a memory; and

at least one hardware device coupled to the memory and configured for:

[A.] obtaining a plurality of radio signals in said set by moving a signal reader to a plurality of locations in an environment, wherein each of said plurality of radio signals is transmitted by said source;

[B.] determining

[i.] one or more signal strengths of said radio signals,

[ii.] a location at which said plurality of radio signals are obtained, and

[iii.] an identifier of said source;

[C.] ***determining a directional vector for each of said plurality of radio signals*** by comparing said one or more signal strengths to signal strengths of other radio signals in said set;

[D.] projecting said determined directional vectors; and

[E.] determining a location of said source of said set of radio signals using an intersection selection criterion that evaluates a number of said projected determined directional vectors that intersect for each of said plurality of radio signals.

REFERENCES[2]

The prior art relied upon by the Examiner is:

Name	Reference	Date
John	US 2003/0122666 A1	July 3, 2003
Shoarinejad	US 2008/0143482 A1	June 19, 2008
Breed	US 2008/0250869 A1	Oct. 16, 2008
Wild	US 2009/0212921 A1	Aug. 27, 2009
Liu	US 2012/0062381 A1	Mar. 15, 2012
Sternowski	US 9,316,719 B1	Apr. 19, 2016

REJECTIONS

A. § 103

The Examiner rejects claims 10, 11, 13, 16, 17, 19, 21, and 23 under 35 U.S.C. § 103 as being unpatentable over the combination of Liu, Wild, and John. Final Act. 4–9. We select claim 16 as the representative claim for this rejection. The contentions discussed herein as to claim 16 are determinative as to this rejection.

The Examiner rejects claims 12 and 18 under 35 U.S.C. § 103 as being unpatentable over the combination of Liu, Wild, John, and Shoarinejad (Final Act. 9–10); rejects claims 15 and 24 under 35 U.S.C. § 103 as being unpatentable over the combination of Liu, Wild, John, and Breed (Final Act. 10); and rejects claims 22 and 25 under 35 U.S.C. § 103 as being unpatentable over the combination of Liu, Wild, John, Breed, and Sternowski (Final Act. 10–11). The contentions discussed herein as to claim

[2] All citations herein to these references are by reference to the first named inventor only.

16 are determinative as to the § 103 rejections of claims 12, 15, 18, 22, 24, and 25.

Therefore, except for our ultimate decision, we do not address the § 103 rejections of claims 10–13, 15, 17–19, and 21–25 further herein.

B. Double Patenting

The Examiner provisionally rejects claims 10–13, 15–19, and 21–25 on the ground of nonstatutory double patenting as being unpatentable over claims 1–6, 8, and 9 of co-pending U.S. Patent Application No. 14/750,219. Final Act. 2–4.

Appellant does not present arguments for this provisional nonstatutory double patenting rejection of claims 10–13, 15–19, and 21–25.

In the Answer, the Examiner states "Every ground of rejection set forth in the Office action [Final Action] dated 7 November 2017, from which the appeal is taken is being maintained by the examiner." Ans. 2.

We select claim 16 as the representative claim for this provisional rejection. Except for our ultimate decision, we do not address further herein the provisional rejection of claims 10–13, 15, 17–19, and 21–25.

OPINION

We have reviewed the Examiner's rejections in light of Appellant's Appeal Brief arguments that the Examiner has erred.

A. § 103

Appellant raises the following argument in contending that the Examiner erred in rejecting claim 16 under 35 U.S.C. § 103.

> Appellant[] respectfully submit[s] that Liu et al. do not teach "determining a directional vector for each of said plurality of

> radio signals." Rather, Liu et al. teach a vector that describes the motion of the tag. See, e.g., par. 0042, relied upon by the Examiner ("Motion-related information for the tag is then determined . . . For example, the vector V determined for the motion of RFID tag 110 from point A to point D may be used along with the reference information to estimate a path of motion of tag 110 and the direction of motion along the path.")[.]

Appeal Br. 6 (emphasis omitted).

We agree with Appellant's argument. We are persuaded there is insufficient articulated reasoning to support the Examiner's determination that Liu, Wild, and John render obvious "determining a directional vector for each of said plurality of radio signals" as required by claim 16. The Examiner determines that Liu discloses "determin[ing] a directional vector for each of said plurality of radio signals." Final Act. 5. However, in the overall context of claim 16, the directional vectors are from the signal source to the signal reader. Otherwise, it would not be possible to perform the function of "determining a location of said source of said set of radio signals using an intersection selection criterion" as required by the final operation of claim 16. As the Appellant points out, Liu does not teach a directional vector (from the signal source to the signal reader), instead Liu teaches "a vector that describes the motion of the tag." Appeal Br. 6 (emphasis omitted). We find nothing in the Examiner's reasoning that explains why an artisan would modify the Liu reference to generate the type of directional vectors required by the overall operation of claim 16.

Therefore, we conclude that there is insufficient articulated reasoning to support the Examiner's final conclusion that claim 16 would have been obvious to one of ordinary skill in the art at the time of Appellant's invention in view of Liu, Wild, and John.

B. Double Patenting

B.1.

Appellant does not present arguments for this provisional nonstatutory double patenting rejection of claim 16. Rather, "Appellant[] propose[s] to defer resolution of the provisional double patenting rejection until there is an indication of allowable subject matter in at least one of the applications." Appeal Br. 5.

B.2.

Where there are two or more applications with conflicting claims, MPEP § 1490 VI.D.2.(a)–(c), provides guidance when the provisional nonstatutory double patenting rejection is the only rejection remaining in an application. If a provisionally rejected application has the earliest effective U.S. filing date compared to a reference application(s), the examiner should withdraw the provisional rejection in that application having the earliest effective U.S. filing date. MPEP § 1490 VI.D.2.(a).

Otherwise, (a) if both applications are actually filed on the same day, or are entitled to the same earliest effective filing date, then the provisional nonstatutory double patenting rejection made in each application should be maintained until the rejection is overcome; or (b) if the provisionally rejected application has an effective U.S. filing date that is later than the effective U.S. filing date of at least one of the reference application(s), then the provisional rejection should be maintained until the applicant overcomes the rejection. MPEP § 1490 VI.D.2.(b)–(c)

B.3.

Panels have the flexibility to reach or not reach provisional obviousness-type double-patenting rejections. *Ex parte Jerg*, Appeal No. 2011-000044, 2012 WL 1375142, at *3 (BPAI Apr. 13, 2012) (informative); *see also Ex parte Moncla*, 95 USPQ2d 1884 (BPAI 2010) (precedential). A panel will exercises its flexibility, to reach or not reach a provisional nonstatutory obviousness-type double-patenting rejection, by taking into consideration (a) the Director's MPEP guidance and (b) the particular facts before the panel.

In *Moncla*, the provisional double-patenting rejection was over claims of a later-filed, co-pending continuation-in-part application (i.e., not entitled to the earlier actual filing date of *Moncla*). *Moncla*, 95 USPQ2d at 1884. The *Moncla* panel concluded that in light of all other rejections being reversed, it is premature in this circumstance to address the Examiner's provisional rejection of the claims. *Id.*

In *Jerg*, the provisional double-patenting rejection was over claims of three co-pending applications including at least one entitled to an earlier effective filing date than *Jerg*. 2012 WL 1375142, at *3. The *Jerg* panel stated:

> [A]t least some of the claims relied upon in the provisional obviousness-type double patenting rejections on appeal either clearly are, or may be, different in language or status from the claims originally relied upon when these rejections were initially made by the Examiner. We decline to reach these rejections because the claims now relied upon are not clearly the same as those originally considered by the Examiner when the rejections were initially made.

Id.

In *Ex parte Byrne*, Appeal No. 2017-011170, 2018 WL 3951632 (PTAB July 30, 2018), the appealed application was a continuation of a parent application (i.e., same actual/effective filing dates). The *Byrne* panel determined that "[b]ecause we affirm the rejections of all claims under either §§ 102 or 103, we need not reach the provisional double patenting rejection." 2018 WL 3951632, at *9.

In *Ex parte Burckart*, Appeal No. 2017-001067, 2018 WL 4458777 (PTAB August 30, 2018), the appealed application was the parent of a continuation application (i.e., same actual/effective filing dates). The *Burckart* panel "decline[d] to address the merits of the provisional obviousness-type double patenting rejection. . . . in light of the [intervening] amendments made to the claims of the '092 application." 2018 WL 4458777, at *5.

B.4.

In this appeal, the Examiner provisionally rejects claims 10–13, 15–19, and 21–25 on the ground of nonstatutory double patenting as being unpatentable over claims 1–6, 8, and 9 of co-pending U.S. Patent Application No. 14/750,219. Final Act. 2–4. The U.S. Patent Application No. 14/668,215 on appeal is the parent of continuation application 14/750,219, and both applications claim the same actual/effective filing date.

Claim 16 of parent application 14/668,215 is reproduced *supra*, as the illustrative claim. Claim 1 of continuation application 14/750,219 reads as follows (formatting and bracketed material added):

> 1. A method for localizing a source of a set of radio signals, the method comprising the steps of:
>
> [A.] obtaining a plurality of radio signals in said set by moving a signal reader to a plurality of locations in an environment, wherein each of said plurality of radio signals is transmitted by said source;
>
> [B.] determining
>
> [i.] one or more signal strengths of said radio signals,
>
> [ii.] a location at which said plurality of radio signals are obtained, and
>
> [iii.] an identifier of said source;
>
> [C.] determining a directional vector for each of said plurality of radio signals by comparing said one or more signal strengths to signal strengths of other radio signals in said set;
>
> [D.] projecting said determined directional vectors; and
>
> [E.] determining a location of said source of said set of radio signals using an intersection selection criterion that evaluates a number of said projected determined directional vectors that intersect for each of said plurality of radio signals,
>
> wherein at least one of said steps are performed by at least one hardware device.

Claim 16 of appealed application 14/668,215 is a system comprising a memory and a hardware device for performing steps A–E. Claim 1 of reference application 14/750,219 is a method for performing the same steps

A–E on a hardware device. These claims are essentially identical except for their preambles.

We have determined that:

(a) The claims are essentially identical in the rejected application and reference application and there are no intervening amendments that differentiate the claims with the subsequent rejection insufficiently explained by the Examiner;

(b) Unlike *Moncla*, the effective filing dates are the same for the rejected application and reference application; and

(c) All other rejections in the rejected application on appeal are now reversed.

We exercise our discretion and elect to reach the Examiner's provisional rejections. Our decision to so elect is based on the determinations *supra* and the Director's guidance that when (a) a provisional nonstatutory double patenting rejection is the only rejection remaining in an application and (b) the filing dates are the same, then "the provisional nonstatutory double patenting rejection made in each application ***should be maintained until the rejection is overcome***." MPEP § 1490 VI.D.2.(b) (emphasis added).

In light of Appellant's failure to present arguments as to the provisional rejection, we affirm *pro forma* the provisional rejection of claim 16.

CONCLUSION

Appellant has established that the Examiner erred in rejecting claims 10–13, 15–19, and 21–25 as being unpatentable under 35 U.S.C. § 103.

The Examiner's rejections of claims 10–13, 15–19, and 21–25 as being unpatentable under 35 U.S.C. § 103 are **reversed**.

The Examiner's provisional rejection of claims 10–13, 15–19, and 21–25 as being unpatentable on the ground of nonstatutory double patenting is **affirmed**.

DECISION SUMMARY

In summary:

Claims Rejected	35 U.S.C. §	References/Basis	Affirmed	Reversed
10, 11, 13, 16, 17, 19, 21, 23	103	Liu, Wild, John		10, 11, 13, 16, 17, 19, 21, 23
12, 18	103	Liu, Wild, John, Shoarinejad		12, 18
15, 24	103	Liu, Wild, John, Breed		15, 24
22, 25	103	Liu, Wild, John, Breed, Sternowski		22, 25
10–13, 15–19, 21–25		Provisional Non-statutory Double Patenting	10–13, 15–19, 21–25	
Overall Outcome			**10–13, 15–19, 21–25**	

TIME PERIOD FOR RESPONSE

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

AFFIRMED