



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.
11/680,176	02/28/2007	Ahmadreza Rofougaran	0250364	4767
25700	7590	01/31/2013	EXAMINER	
FARJAMI & FARJAMI I.I.P 26522 LA ALAMEDA AVENUE, SUITE 360 MISSION VIEJO, CA 92691			GARCIA, SANTIAGO	
			ART UNIT	PAPER NUMBER
			2633	
			NOTIFICATION DATE	DELIVERY MODE
			01/31/2013	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):

docketing@farjami.com
farjamidocketing@yahoo.com
ffarjami@farjami.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte AHMADREZA ROFOUGARAN

Appeal 2011-003667
Application 11/680,176
Technology Center 2600

Before: JOSEPH L. DIXON, ST. JOHN COURTENAY III, and
CARLA M. KRIVAK, *Administrative Patent Judges*.

DIXON, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant appeals under 35 U.S.C. § 134(a) from a final rejection of claims 1-21. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

INVENTION

Appellant's claimed invention is generally related to polar transmitters and more specifically, to a method and system for using a phase locked loop (PLL) for upconversion in a wideband polar transmitter. (Specification ¶[0003].)

Independent claim 1, reproduced below, is representative of the subject matter on appeal.

1. A method for processing communication signals in a transmitter, the method comprising:

polar modulating a signal by generating a modulated intermediate frequency (IF) signal utilizing a direct digital frequency synthesizer;

upconverting said modulated IF signal to a radio frequency (RF) signal utilizing a phase locked loop;

filtering said RF signal utilizing said phase locked loop;
and

amplitude modulating said filtered RF signal.

REFERENCES

Khan	US 6,483,388 B2	Nov. 19, 2002
Liu	US 6,924,711 B2	Aug. 2, 2005

REJECTIONS

Claims 1-3, 5, 7-10, 12, and 14 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Liu.

Claims 4, 6, 11, 13, 18, and 20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Liu and Khan.

Claims 15-17 and 20-21 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Liu.

ANALYSIS
Anticipation

Appellant relies upon the same arguments advanced with respect to independent claim 8. Therefore, we select independent claim 1 as the representative claim and will address Appellant's arguments thereto.

Appellant contends that Liu does not disclose or suggest at least the limitation of "polar modulating a signal by generating a modulated intermediate frequency (IF) signal utilizing a direct digital frequency synthesizer." (App. Br. 7-8). Appellant further contends that "Liu does not disclose generating a modulated IF signal utilizing a DDFS, and polar modulating a signal based on the generated modulated IF signal." (App. Br. 9). Appellant's argument is not commensurate in scope with the express language of independent claim 1 where polar modulating a signal is not recited to be "based on" the generated modulated IF signal. Therefore, Appellant's argument is not persuasive of error in the Examiner's finding of anticipation.

Appellant further contends that "Liu discloses a DDS that generates an IF signal (as opposed to a modulated IF signal) from a phase modulated component, but does not disclose or suggest at least the limitation of 'generating a modulated intermediate frequency (IF) signal utilizing a direct digital frequency synthesizer,'" (App. Br. 9). Again, Appellant does not specifically explain the difference between the teachings of Liu and the claimed invention. We find that the phase modulated components used in Liu to generate the IF signal would generate a modulated IF signal.

Therefore, we find Appellant's argument to be unpersuasive of error in the Examiner's finding of anticipation.

Appellant further contends that Liu does not disclose or suggest at least the limitation of "upconverting said modulated IF signal to a radio frequency (RF) signal utilizing a phase locked loop" (App. Br. 9). Appellant contends that "Liu discloses utilizing a VCO and a quadrature modulator that generates a modulated IF signal (as opposed to a DDFS that generates a modulated IF signal), but does not disclose or suggest at least the limitation of 'upconverting said modulated IF signal [that is generated utilizing a DDFS]'" (App. Br. 10). Appellant contends that the modulated IF signal is generated by a DDFS, but the language merely states "generated utilizing a DDFS" which we find is broader than the argued "generated by a DDFS." Therefore, Appellant's argument does not show error in the Examiner's finding of anticipation. Additionally, the Examiner maintains that the power amplifier is an RF power amplifier (Ans. 9) which would necessarily mean that the signal is modulated to the RF spectrum. We agree with the Examiner. Appellant does not respond to the Examiner's finding in the Reply Brief.

Appellant presents similar arguments in the Reply Brief, which we find unpersuasive of error in the Examiner's finding of anticipation.

With respect to dependent claims 2, 3, 7, and 9, Appellant relies upon the same arguments advanced with respect to independent claim 1 and repeats the language of the dependent claims. (App. Br. 11-13). We find Appellant's general arguments for patentability do not show error in the Examiner's finding of anticipation.

With respect to dependent claims 5 and 12, Appellant relies on the arguments advanced with respect to independent claim 1, repeats the language of the claim, and presents general arguments for patentability. (App. Br. 14-15). We find Appellant's arguments unpersuasive of error in the Examiner's finding of anticipation.

With respect to dependent claims 7 and 14, Appellant relies upon the arguments advanced with respect to independent claim 1, repeats the language of the claim, and presents general arguments for patentability. (App. Br. 15-16). We find Appellant's arguments unpersuasive of error in the Examiner's finding of anticipation.

Obviousness

With respect to claims 4, 6, 11, 13, and 15-21, Appellant presents similar arguments for patentability addressed with respect to independent claims 1 and 8. (App. Br. 18-21). Since we found Appellant's arguments to be unpersuasive with respect to representative independent claim 1, we similarly find them unpersuasive with respect to independent claim 15.

Appellant presents similar arguments for patentability, as addressed above, with respect to dependent claims 16, 17, 19, and 21. We similarly find Appellant's arguments to be unpersuasive of error in the Examiner's conclusion of obviousness.

Appellant additionally presents arguments to the combination of references and contends that the Examiner has not met his burden of articulating reasoning with some rational underpinning. (App. Br. 23). We disagree with Appellant and find that the Examiner has set forth a motivation for the combination. Although Appellant finds it to be "cursory,"

Appeal 2011-003667
Application 11/680,176

Appellant does not provide a persuasive showing why the Examiner's articulated reasoning with rationale underpinnings does not support the Examiner's conclusion. Therefore, Appellant's argument is unpersuasive, and we sustain the rejection of claims 4, 6, 11, 13, and 15-21.

CONCLUSION

The Examiner is did not err in rejecting claims 1-3, 5, 7-10, 12, and 14 under 35 U.S.C. § 102(b).

The Examiner did not err in rejecting claims 4, 6, 11, 13, 18, and 20 under 35 U.S.C. § 103(a).

The Examiner did not err in rejecting claims 15-17 and 20-21 under 35 U.S.C. § 103(a).

DECISION

The Examiner's decision rejecting claims 1-21 is affirmed.

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).

AFFIRMED

pgc