

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 49

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte LUIS A. BONET, ALAN L. WESTWICK, MAURICIO A. ZAVALETA
JAMES A. TUVELL, DAVID E. BUSH and MICHAEL D. FLOYD

Appeal No. 96-3902
Application 08/442,742¹

ON BRIEF

Before JERRY SMITH, FLEMING and DIXON, **Administrative Patent Judges.**

DIXON, **Administrative Patent Judge.**

DECISION ON APPEAL

This is a decision on appeal from the Examiner's final rejection of claims 1-20, which are all of the claims pending in this application.

¹ Application for patent filed May 17, 1995. According to appellants, this application is a continuation of application Serial No. 08/297,439, filed August 29, 1994, which is a continuation of application Serial No. 07/788,977, filed November 7, 1991, both abandoned.

BACKGROUND

Claim 1 is representative of the claimed invention and reproduced below:

1. A mixed signal processing system comprising:

first regulation means coupled to first and common power supply voltage terminals respectively providing first and common power supply voltages thereon, for providing a second power supply voltage at a first predetermined potential referenced to said common power supply voltage, an absolute value of said first predetermined potential being less than an absolute value of a nominal potential of said first power supply voltage referenced to said common power supply voltage and characterized as being substantially constant with respect to changes in said first power supply voltage;

means coupled to said first and common power supply voltage terminals, for providing a third power supply voltage at a second predetermined potential referenced to said common power supply voltage, an absolute value of said second predetermined potential being greater than said absolute value of said nominal potential, and including second regulation means for keeping said second predetermined potential substantially constant with respect to changes in said first power supply voltage;

a digital subsystem coupled to said common power supply voltage terminal for receiving said second power supply voltage at a power supply voltage terminal thereof and a digital signal at an input terminal thereof; and

an analog subsystem coupled to said digital subsystem and to said common power supply voltage terminal, for receiving said third power supply voltage at a power supply voltage terminal thereof and an analog signal at an input terminal thereof.

The present invention relates to a system for improving the operation of a mixed

signal processing system, such as the handset of a cordless phone. In the mixed signal processing system, plural stable power voltages are required for the reliable and efficient operation of the handset to extend the operational duration of the rechargeable battery power source and for proper, efficient operation of the CMOS circuitry. The system uses a stable, precise reference voltage to maintain the system voltages for the digital and analog subsystems in the system as the battery power source varies in voltage over time. The system uses plural voltage regulators to maintain the system voltages.

The prior art references of record relied upon by the Examiner in rejecting the appealed claims are:

Gabara	5,043,605	Aug. 27, 1991 (Filed : Jun. 26, 1989)
Shibasaki (UK Patent Application)	2 078 021	Dec. 23, 1981)

Claims 1-5, and 7-20 stand rejected under 35 U.S.C. § 112, first paragraph for lack of enablement. Claims 1-7 stand rejected under 35 U.S.C. § 112, second paragraph as not particularly pointing out and distinctly claiming the subject matter

which applicant regards as the invention. Claims 1-7 stand rejected under 35 U.S.C. § 102 as being unpatentable over Gabara. Claims 1-4 stand rejected under 35 U.S.C. §

102 as being unpatentable over Shibasaki.

Rather than reiterate the conflicting viewpoints advanced by the Examiner and the appellants, we make reference to the brief² and answer³ for the details thereto.

OPINION

After a careful review of the evidence before us, we disagree with the Examiner that claims 1-5, and 7-20 are properly rejected under 35 U.S.C. § 112, first paragraph and we will reverse this rejection of claims 1-5, and 7-20. We disagree with the Examiner that claims 1-7 are properly rejected under 35 U.S.C. §112, second paragraph and we will reverse this rejection of claims 1-7. We disagree with the Examiner that claims 1-7 are properly rejected under 35 U.S.C. § 102 and we will reverse this rejection of claims 1-7. We disagree with the Examiner that claims 1-4 are properly rejected under 35 U.S.C. § 102 and we will reverse this rejection of claims 1-4.

FIRST PARAGRAPH

Appellants argue that the Examiner's rejection is a question of breadth not

² Appellants filed an appeal brief filed April 1, 1996, Paper No. 43. We will refer to this appeal brief as simply the brief. Appellants filed a response after final on January 16, 1996, but did not amend the claims.

³ The Examiner responded to the brief with an Examiner's Answer mailed, May 24, 1996, Paper No. 44. We will refer to this Examiner's answer as simply the answer.

enablement of the claims and disclosure. (See brief at pages 6-8.) We agree with appellants. We find the claims adequately enabled for one of ordinary skill in the art to make and use the claimed invention from the disclosure, as originally filed. The Examiner argues at page 7 of the answer that the reference voltage is essential to the operation of the invention. We agree that the use of the reference voltage is essential to the operation of the disclosed embodiment for generating the constant voltages, but the lack of this element's express recitation in the claims does not therefore make the enablement of the disclosure lacking as the Examiner asserts. Rather, it is a question of breadth of the claimed invention which should be addressed by the Examiner's application of prior art under 35 U.S.C. §§ 102 and 103. Similarly, we disagree with the Examiner's discussion as to the "means plus function" limitation as it relates to the reference voltage. (See answer at pages 6-8.) Appellants have argued that the "substantially constant" voltages may be produced by other circuits. (See brief at page 7.) Appellants' invention is directed to the operation of the supply of power to the mixed signal processing system. The lack of an express limitation to the reference voltage is not an enablement problem, but rather it is a question of scope of claim for application of prior art by the Examiner.

SECOND PARAGRAPH

The Examiner argues that the use of "substantially" in claim 1 does not particularly

point out and distinctly claim the invention. Appellants assert that the language does not present a problem under the second paragraph of Section 112 because the Examiner has not applied the rejection previously and that many other patents use the same and similar phraseology. (See brief at pages 8-10.) We disagree with the appellants on this rationale, but we do find that the claims set forth the invention with reasonable particularity.

The Examiner discusses the "second regulation means" as it relates to the disclosure of the corresponding structure, materials, or acts under 35 U.S.C. § 112, sixth paragraph. The Examiner further argues that "it is clearly improper to separate to [sic] function[s] of the overall structure into an individual means." (answer page 10). We disagree. Under the sixth paragraph of section 112, an invention may be claimed in this manner as a way to provide flexibility in drafting the legal metes and bounds of the invention. Although the sixth paragraph statutorily provides that one may use means-plus-function language in a claim, one is still subject to the requirement that a claim "particularly point out and distinctly claim" the invention. Therefore, if one employs means-plus-function language in a claim, one must set forth in the

specification an adequate disclosure showing what is meant by that language. If an applicant fails to set forth an adequate disclosure, the applicant has in effect failed to particularly point out and distinctly claim the invention as required by the second paragraph

of section 112. We find that appellants have provided an adequate disclosure to support the limitations set forth using the sixth paragraph of Section 112. Further, we find the appellants have set forth the invention with a reasonable degree of particularity and distinctness. Therefore, we do not sustain the rejection of claims 1-7.

35 U.S.C. § 102

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. **In re Robertson** 169 F.3d 743, 745, 49 USPQ2d 1949 ,1950 (Fed. Cir. 1999) **citing Verdegaal Bros. Inc. v. Union Oil Co.**, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The inquiry as to whether a reference anticipates a claim must focus on what subject matter is encompassed by the claim and what subject matter is described by the reference. As set forth by the Federal Circuit in **Kalman v. Kimberly-Clark Corp.**, 713 F.2d 760, 772, 218 USPQ 781, 789 (Fed. Cir. 1983), it is only necessary for the claims to "'read on' something disclosed in the reference, i.e., all limitations of the claim are found in the reference, or 'fully met' by it."

A close review of the Gabara patent clearly shows that Gabara does not disclose that there is "an analog subsystem coupled to the digital subsystem . . . and an analog signal at the input terminal thereof." The Examiner argues that "[a]s is notoriously well

known, all circuits are analog.” (See answer at pages 14-15.) While the Examiner may be technically correct, this is an unreasonable interpretation of the claim limitation and of the teaching/disclosure of Gabara. Moreover, Gabara would not operate properly, with an analog signal applied to the input of transistors M3 or M4. Furthermore, the inputs to M2 and M3 of the digital subsystem as set forth by the Examiner are the same as those input to the analog system. Clearly, these inputs are not both analog and digital inputs at the same time. This would be an unreasonable interpretation. The Examiner states that appellants’ argument that Gabara is not a “power system for a mixed signal processing system” is not persuasive because it is “merely ‘intended use’”. (See answer at page 6.) We disagree. The field of use in the preamble embellishes the fact that the limitations of the claimed invention clearly require the presence of both an analog subsystem and a digital subsystem in the “mixed signal” processing system. As discussed above, Gabara does not disclose the presence of both the analog and the digital subsystems. Therefore, the Examiner has not presented a *prima facie* case of anticipation of the claimed invention as set forth in claim 1 by Gabara.

Similarly, the Shibasaki reference does not teach both digital and analog subsystems in a mixed signal system which are powered in the manner claimed. (See brief at pages 16-17.) Moreover, the second potential produced is not “substantially constant with respect to changes in said first power supply voltage” as set forth in the

language of claim 1. The Examiner has set forth that the “means (4) coupled to said first and common power supply voltage terminals” would provide the third power supply at the second predetermined voltage (V_2) (see answer at pages 5-6). We disagree since the step-up circuit is not coupled to the supply voltage, V_E . Voltage V_1 is the supply voltage at this portion of the circuit and the step-up circuit generates voltages V_2 and V_3 which vary with the input voltage V_1 . Therefore, the Examiner has not presented a ***prima facie*** case of anticipation of the invention as set forth in claim 1 by Shibasaki.

In reaching our decision in this appeal, we have given careful consideration to the appellants' specification and claims, to the applied prior art references, and to the respective positions articulated by the appellants and the Examiner. Upon evaluation of all the evidence before us, it is our conclusion that the evidence adduced by the Examiner is not sufficient to establish a ***prima facie*** case of anticipation with respect to claim 1. Accordingly, we will not sustain the Examiner's rejection of claim 1 under 35 U.S.C. § 102.

Since all the limitations of independent claim 1 are not disclosed by the applied prior art, we cannot sustain the Examiner's rejection of appealed claims 2-7 which depend therefrom, under 35 U.S.C. § 102.

CONCLUSION

To summarize, the decision of the Examiner rejecting claims 1-5 and 7-20 under

Appeal No. 96-3902
Application 08/442,742

35 U.S.C. § 112, first paragraph, the decision of the Examiner rejecting claims 1-7 under
35 U.S.C. § 112, second paragraph, and the decision of the Examiner rejecting claims 1-
7 under 35 U.S.C. § 102 are reversed. The decision of the Examiner is reversed.

REVERSED

JERRY SMITH)	
Administrative Patent Judge)	
)	
)	
)	BOARD OF PATENT
MICHAEL R. FLEMING)	APPEALS AND
Administrative Patent Judge)	INTERFERENCES
)	
)	
)	
JOSEPH L. DIXON)	
Administrative Patent Judge)	

vsh

Appeal No. 96-3902
Application 08/442,742

Maurice J. Jones
Motorola Incorporation Intellectual
Property Department M/D TX07/F4
505 Barton Springs Road
Suite 500
Austin, TX 78704