

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

This opinion (1) was not written for publication and (2) is not binding precedent of the Board.

Paper No. 27

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte WILLIAM R. SHORT, ROBERT P. PARKER,
and RICHARD A. KIRKPATRICK

Appeal No. 95-2867
Application 07/744,324¹

HEARD: December 9, 1997

Before FLEMING, LEE, and TORCZON, Administrative Patent Judges.
TORCZON, Administrative Patent Judge.

FINDINGS OF FACT AND CONCLUSIONS OF LAW

FINDINGS OF FACT

We have reviewed the record in its entirety in light of the arguments of Appellants and the examiner. Our decision presumes

¹ Attorney docket number AAB0SQ38 02103/197001. (Paper 1 at 1.) Application for patent filed August 13, 1991.

familiarity with the entire record. A preponderance of the evidence of record supports each of the following fact findings.

A. The nature of the case

1. This is an appeal under 35 U.S.C. § 134 from the final rejection of claims 34, 35, and 39. (Paper 12 at 1.) No other rejections are before us. The examiner has indicated that claims 1-33, 36-38, 40, and 41, which are the only other claims pending, are all allowed. (Paper 9 at 1.)

2. The application on appeal was filed on 13 August 1991. (Paper 1 at 1.) Appellants have not claimed any benefit under 35 U.S.C. §§ 119 or 120. At the hearing, Appellants' counsel confirmed that Bose Corporation is the real party in interest.

3. The application is entitled "AM noise reducing". Appellants report that alternating-current (AC) power lines are a common source of radio-frequency noise. (Paper 1 at 2:21-3:19.) The subject matter of the claimed invention is a method for reducing received noise in amplitude-modulated (AM) signals. (Paper 1 at 1.) The only independent claim on appeal defines the claimed invention as follows (Paper 1 at 25):

34. A method of processing an AM signal comprising the steps of:

filtering at least a first portion of said AM signal to obtain a predetermined spectral range of

said signal,

detecting the noise present within said predetermined spectral range, and

processing at least one portion of said AM signal in response to the detection of a predetermined amount of noise in said spectral range.

According to Appellants, the filtering and detecting steps correspond to the acts performed by filter **36** and noise detector **38**. (Paper 15 at 6.) The structures and functions of these components are shown in Figures 1, 2, and 4 and are discussed in specification at pages 10-12. The filter **36** may be a narrow bandpass filter centered at AC power line frequency. (Paper 1 at 10:22-24.) The detector **38** has a comparator **46** that switches from low to high when the filtered signal exceeds a threshold voltage **48**. (Paper 1 at 11:28-33.)

4. The examiner has rejected claims 34 and 39 under 35 U.S.C. § 102, and has rejected claim 35 under 35 U.S.C. § 103, in view of the following reference (Paper 9 at 2-3):

Inoue	4,718,115	Jan. 5, 1988
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5. The examiner identified Inoue's radio-frequency band-pass filter (RF BPF) **11** as providing acts equivalent to Appellants' filtering step.² Similarly, the examiner identified Inoue's squelch

² Since both Inoue's and Appellants' detector receive a processed IF signal, Inoue's IF band-pass filter (IF BPF) **123** seems a

signal producing circuit **15** as providing acts equivalent to Appellants' detecting step. (Paper 9 at 2-3.)

B. Claims 34 and 39 were anticipated

6. Inoue's filter **11** passes through only signals from the antenna that correspond to a desired frequency band. (3:12-21.) This output passes via the intermediate frequency (IF) stage **12** to the squelch signal producing circuit **15**. (4:18-23.) The squelch signal producing circuit **15** includes a detector **151** that produces an envelope signal based on the IF signal. The envelope signal passes to the comparator **152**, which compares the envelope signal to a reference signal to produce the squelch signal. (3:50-62.)

7. The acts performed by Appellants' narrow passband filter **36** and Inoue's RF band-pass filter **11** (or IF BPF **123**) are equivalent. Both are described as passing a specified frequency band.

8. The acts performed by Appellants' detector **38** and Inoue's voltage comparator **152**, **152a** in his squelch signal producing circuit **15** are equivalent. Appellants' detector **38** may be no more than a comparator **46** with a threshold voltage input **48**. (Fig. 2; Paper 1 at 11:29-33.) Thus, fundamentally, Appellants "detect[] the

closer equivalent to Appellants' narrow bandpass filter **36**.

noise present" by comparing the signal to a threshold voltage. The fact that Inoue's squelch signal producing circuit **15** also contains a "detector **151**" or "noise detector **151a**" for producing an envelope signal does not affect the analysis because Appellants use the term "comprising" in defining the steps of their claimed method. See Genentech Inc. v. Chiron Corp., 112 F.3d 495, 501, 42 USPQ2d 1608, 1613 (Fed. Cir. 1997) (explaining the effect of "comprising").

9. Inoue further processes the AM signal by producing a squelch signal when the noise level in the filtered IF signal does not meet some predetermined threshold. (3:60-62; 6:26-30.)

10. Claim 39, which depends from claim 34, further requires that "said one portion [which is processed] is said first portion [which was filtered]." Inoue produces a squelch signal based on noise in the filtered frequency band. Although Inoue does not specify that the squelch signal is related to the filtered frequency band, we find Inoue must be squelching at least the filtered frequency band since nothing in Inoue suggests any reason for squelch any frequencies other than those in which noise is detected. We find the examiner has sufficiently established that Inoue teaches the limitation of claim 39 to shift the burden to Appellants. In re

Spada, 911 F.2d 705, 708, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

Appellants have not met this burden.

11. Based on Findings 5 to 10, we find that the preponderance of evidence in this record supports the examiner's rejection of claims 34 and 39 under section 102.

C. Evidence of obviousness

12. Claim 35, which depends from claim 34, further requires "said filtering step selectively [to] pass[] a spectra of frequency related to a local AC line frequency." Inoue is directed at a different problem--avoiding creating interfering radio signals during a diagnostic procedure--and thus is silent about noise from AC power lines. It is not clear on this record that a person having ordinary skill in the art would have considered Inoue to have any relevance to the AC power line noise problem. Consequently, the preponderance of evidence in the record suggests that any relation of passed spectra to local AC line frequency would be coincidental. This putative coincidence does not establish motivation or inherency.

13. Appellants have not contested, or provided evidence of, the level of skill in the art or secondary considerations.

CONCLUSIONS OF LAW

A. Claim construction

1. Appellants invoke In re Donaldson Co., 16 F.3d 1189, 29 USPQ2d 1845 (Fed. Cir. 1994) (en banc), in defending their claims. The Donaldson decision requires the Patent and Trademark Office to construe means- or step-plus-function limitations in terms of corresponding structures or acts, respectively, disclosed in the specification. 16 F.3d at 1194-95, 29 USPQ2d at 1850; 35 U.S.C. § 112. It is proper for us to rely on this invocation in the record in determining what Appellants intend to claim. Alpex Computer Corp. v. Nintendo Co., 102 F.3d 1214, 1220, 40 USPQ2d 1667, 1672 (Fed. Cir. 1996). Accordingly, we understand the steps in the appealed claims to be limited to the corresponding acts set forth in the specification. O.I. Corp. v. Tekmar Co., 115 F.3d 1576, 1583, 42 USPQ2d 1777, 1782 (Fed. Cir. 1997). Although the disclosure focuses more on structures than on acts, the functions of the structures provide a sufficient basis for us to determine the underlying acts (just as we rely on the structures in the reference to determine its inherent acts).

B. Obviousness

2. Inoue does not teach or suggest a reason for tuning the filter to a frequency related to a local AC line frequency. The fact

that Inoue may incidentally filter such a frequency falls below the threshold for motivation or inherency. In re Rijckaert, 9 F.3d 1531, 1534, 28 USPQ2d 1955, 1957 (Fed. Cir. 1993).

C. New matter

3. Appellants have asked us to reverse the examiner's objection to certain amendments to the drawings and specification. (Paper 15 at 8-11.) The examiner says that "the features of claims 18-21, which include the signal and linear signal interpolation circuitry, and the circuitry of sampling and holding a portion of the signal, must be shown or canceled." (Paper 9 at 2, citing 35 U.S.C. § 132.) The new matter prohibition in section 132 applies to the disclosure. It is not an appropriate basis for rejecting new or amended claims.³ In re Rasmussen, 650 F.2d 1212, 1214, 211 USPQ 323, 325 (CCPA 1981).

4. The examiner has not rejected claims 18-21. (Paper 9 at 1.) Our jurisdiction is generally restricted to rejected claims. See 37 CFR § 1.191(c). Although we are authorized to review new matter objections ancillary to claim rejections, in the absence of a corresponding rejection, the proper vehicle for review is a petition under 37 CFR § 1.181. MPEP § 2163.05(b); § 1002.02(c)(4)(c).

³ Claims 18-21 are original, unamended claims. (Paper 1 at 21.)

Appellants have identified, and we know of, no authority for us to review this objection in isolation.

DECISION

We affirm the examiner's rejection of claims 34 and 39, but reverse the rejection of claim 35. We dismiss Appellants' request for relief from the examiner's objection as not being within our jurisdiction on the facts of this record.

AFFIRMED-IN-PART

MICHAEL R. FLEMING)	
Administrative Patent Judge)	
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