The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte FRANCISCO J. NAPOLEZ and TIMOTHY T. DUNCAN

Appeal 2007-1916
Application 10/753,113
Technology Center 3600

Decided: May 18, 2007

Before MURRIEL E. CRAWFORD, LINDA E. HORNER, and DAVID B. WALKER, *Administrative Patent Judges*.

WALKER, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Francisco J. Napolez et al. ("Appellants") seek our review under 35 U.S.C. § 134 of the Examiner's final rejections of claims 3-9. We have jurisdiction under 35 U.S.C. § 6(b). We reverse.

THE INVENTION

Appellants claim a collar-mounted electronic "bark limiter" or dog bark training device (Specification 1:3-4). Claim 3, reproduced below, is representative of the subject matter on appeal.

> 3. A collar-mounted electronic apparatus for control of barking by a dog, comprising:
>
> > (a) a housing supported by a collar for attachment to the dog's neck;
> >
> > (b) first and second stimulus electrodes in contact with the dog's skin are connected to a surface of the housing for applying aversive stimulus control signals to the dog's neck;
> >
> > (c) a vibration sensor supported by the housing in contact with the dog's neck for sensing vibrations and generating vibration signals in response to vocalizing by the dog;
> >
> > (d) a controller in the housing having an input coupled to receive the signals produced by the vibration sensor,
> >
> > (e) a motion detector mounted in said housing and connected in substantially fixed relationship to the housing for producing a neck motion detection signal in response to a characteristic neck movement of the dog that characteristically accompanies barking by the dog;
> >
> > (f) the controller including output terminals for producing aversive stimulus control signals and having an input coupled to receive the neck motion detection signal and operative in response to the

> neck motion detection signal and signals from the vibration sensor to enable the controller to produce the aversive stimulus control signals; and
>
> (g) circuitry coupled to the controller to produce the aversive stimulus signals between the first and second stimulus electrodes in response to the aversive stimulus control signals.

THE REJECTIONS

The Examiner relies upon the following as evidence of unpatentability:

Hollis	US 6,263,836 B1	Jul. 24, 2001

The following rejections are before us for review.

1. Claims 3-9 are rejected under 35 U.S.C. § 102(b) as anticipated by Hollis.
2. Claim 5 is rejected under 35 U.S.C. § 103(a) as unpatentable over Hollis.

ISSUE

The issue before us is whether Appellants have shown that the Examiner erred in rejecting claims 3-9 under 35 U.S.C. § 102(b) as anticipated by Hollis; and claim 5 under 35 U.S.C. § 103(a) as unpatentable over Hollis. The issue turns on whether Hollis discloses a controller that is operative in response to the combination of a neck motion signal and a signal from a vibration sensor to enable the controller to produce an aversive stimulus control signal to a dog.

Arguments which Appellants 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) (2004). Except as will be noted in this opinion, Appellants have not presented any substantive arguments directed separately to the patentability of the dependent claims. In the absence of a separate argument with respect to those claims, they stand or fall with the representative independent claim. *See In re Young*, 927 F.2d 588, 590, 18 USPQ2d 1089, 1091 (Fed. Cir. 1991). *See also* 37 C.F.R. § 41.37(c)(1)(vii).

FINDINGS OF FACT

The following enumerated findings are supported by at least a preponderance of the evidence. *Ethicon, Inc. v. Quigg*, 849 F.2d 1422, 1427, 7 USPQ2d 1152, 1156 (Fed. Cir. 1988) (explaining the general evidentiary standard for proceedings before the Office).

1. Hollis discloses an electronic animal training device which produces training stimuli, including sound and/or electric shock, in response to certain actions by the animal, including barking. (Hollis, Abstract, col. 3, ll. 1-5).
2. Hollis describes and depicts stimulation electrodes which provide electrical paths to a dog's skin (Hollis, col. 3, ll. 58-59, Fig. 2). The electrodes are at one point described as two metal collar studs, which can deliver a short pulsed electrical shock generated by shock circuit 57 (Hollis, col. 5, ll. 56-58). Detail A of Figure 2 shows that the electrodes are held in place against the dog's neck by a collar.

3. Hollis discloses “a microphone located in the bottom of the electronics enclosure and just above the dog's chest area is used in detecting barking vibrations through the chest cavity.” (Hollis, col. 2, ll. 24-27). Hollis further describes that “[t]he microphone 14 picks up noise from dog's 12 chest cavity and is used to sense vocalization, such as, for example, barking.” (Hollis, col. 3, ll. 59-62).
4. Hollis describes an accelerometer that provides monitoring of animal body movement and provides input to microprocessor 51 (Hollis, col. 6, ll. 45-46). “The dual axes accelerometer 50 provides digital signals to microprocessor 51 proportional to vertical and horizontal orientation, and dynamic movement” (Hollis, col. 5, ll. 14-17). Hollis provides no disclosure of the accelerometer producing a neck motion detection signal in response to “characteristic neck movement of the dog that characteristically accompanies barking by the dog.”
5. Hollis does not teach a controller or control circuitry that produces aversive stimulus control signals in response to the combination of a neck motion detection signal and signals from a vibration sensor. Hollis discloses using the vibration sensor alone to detect barking and the accelerometer alone to detect jumping or digging (Hollis, col. 2, ll. 22-27). It does not teach using the two signals in combination to determine whether a valid bark has occurred and aversive stimulus should be applied.

6. The Specification teaches that: "In accordance with the present invention, the vibration detection operation and motion detection operation are combined to determine whether an aversive stimulus signal should be produced between electrodes 5B and 5C." (Specification 15:18–16:1). It further instructs the reader to: "Note that it is important that the dog not receive stimulus due to motion alone, because detecting of motion through the motion sensor 40 does not accurately determine the occurrence of valid barking." (Specification 26:7-9).

PRINCIPLES OF LAW

"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." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987), *cert. denied*, 484 U.S. 827 (1987). Analysis of whether a claim is patentable over the prior art under 35 U.S.C. § 102 begins with a determination of the scope of the claim. The properly interpreted claim must then be compared with the prior art.

We determine the scope of the claims in patent applications "not solely on the basis of the claim language, but upon giving claims their broadest reasonable construction 'in light of the specification as it would be interpreted by one of ordinary skill in the art.'" *Phillips v. AWH Corp.*, 415 F.3d 1303, 1316, 75 USPQ2d 1321, 1329 (Fed. Cir. 2005)(en banc) (*quoting In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364, 70 USPQ2d 1827, 1830 (Fed. Cir. 2004)). We

must be careful not to read a particular embodiment appearing in the written description into the claim if the claim language is broader than the embodiment. *See Superguide Corp. v. DirecTV Enterprises, Inc.*, 358 F.3d 870, 875, 69 USPQ2d 1865, 1868 (Fed. Cir. 2004)("Though understanding the claim language may be aided by the explanations contained in the written description, it is important not to import into a claim limitations that are not part of the claim. For example, a particular embodiment appearing in the written description may not be read into a claim when the claim language is broader than the embodiment.") The challenge is to interpret claims in view of the specification without unnecessarily importing limitations from the specification into the claims. See *E-Pass Techs., Inc. v. 3Com Corp.*, 343 F.3d 1364, 1369, 67 USPQ2d 1947, 1950 (Fed. Cir. 2003).

In rejecting claims under 35 U.S.C. § 103(a), the examiner bears the initial burden of establishing a prima facie case of obviousness. *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). *See also In re Piasecki*, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984). It is incumbent upon the examiner to establish a factual basis to support the legal conclusion of obviousness. *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006) ("[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness"). In so doing, the examiner is expected to make the factual determinations set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 17, 148 USPQ 459, 467 (1966). *KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1734, 82 USPQ2d 1385, 1391 (2007) ("While the

sequence of these questions might be reordered in any particular case, the [*Graham*] factors continue to define the inquiry that controls.")

> [T]he scope and content of the prior art are ... determined; differences between the prior art and the claims at issue are ... ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented.

Id., 127 S.Ct. at 1729-30, 82 USPQ2d at 1388 (quoting *Graham v. John Deere Co.*, 383 U.S. 1, 17-18, 148 USPQ 459, 467 (1966)) (internal quotations omitted).

These showings by the examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. *See Oetiker*, 977 F.2d at 1445, 24 USPQ2d at 1444. Only if this initial burden is met does the burden of coming forward with evidence or argument shift to the appellant. *Id.* at 1445, 24 USPQ2d at 1444. *See also Piasecki*, 745 F.2d at 1472, 223 USPQ at 788. Obviousness is then determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. *See Oetiker*, 977 F.2d at 1445, 24 USPQ2d at 1444; *Piasecki*, 745 F.2d at 1472, 223 USPQ at 788.

ANALYSIS

We first construe the meaning of the phrase "the controller . . . operative in response to the neck motion detection signal and signals from the vibration sensor

to enable the controller to produce the aversive stimulus control signals" as used by the Appellants in claim 3. The Specification makes clear that the claim language "operative in response to the neck motion detection signal and signals from the vibration sensor to enable the controller to produce the aversive stimulus control signals" means that the claimed controller is operative in response to the combination of the neck motion signal and signals from the vibration sensor to enable the controller to produce the aversive stimulus control signals (Finding of Fact 6). We find this to be the broadest reasonable construction in light of the specification as it would be interpreted by one of ordinary skill in the art.

Based on this claim construction, the rejection of claims 3-9 as anticipated by Hollis is improper, because Hollis does not disclose each and every limitation as set forth in claims 3-9, either expressly or inherently. In particular, Hollis fails to anticipate independent claim 3, because it does not does not teach a controller that produces aversive stimulus control signals in response to the combination of a neck motion detection signal and signals from a vibration sensor (Finding of Fact 5). Hollis similarly does not anticipate independent claim 6, because it does not disclose control circuitry that produces aversive stimulus control signals in response to the signals produced by the vibration sensor if a motion detection signal is received concurrently with the signals produced by the vibration sensor. Independent claim 8 also is improperly rejected as anticipated by Hollis, because Hollis fails to teach means for operating control circuitry that produces aversive stimulus control signals in response to the signals produced by the vibration sensor if a motion detection signal is received concurrently with the signals produced by

the vibration sensor. Because Hollis fails to disclose each limitation of independent claims 3, 6, and 8, it also fails to anticipate dependent claims 4, 5, 7, and 9.

The Examiner also improperly rejected claim 5 as unpatentable over Hollis under § 103(a). Examiner asserts that:

> Hollis discloses the claimed invention except for explicitly stating the claimed circuit connectors per se; for example, high impedance, driver, resistors, transistors, etc. It would have been obvious to one having ordinary skill in the art at the time the invention was made to implement these various connectors, since these are well known in the electronics art and since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japiske*, 86 USPQ 70.

(Answer 4). The Examiner is incorrect because Hollis fails to disclose a controller or control circuitry that produces aversive stimulus control signals in response to the combination of a neck motion detection signal and signals from a vibration sensor as required by claim 3, the independent claim from which claim 5 depends. Examiner has provided no reference showing such a controller, nor has he made a prima facie case of obviousness over Hollis.

CONCLUSIONS

Based on the findings of facts and analysis above, we conclude that Appellants have shown that the Examiner erred in rejecting claims 3-9 under 35

U.S.C. § 102(b) as anticipated by Hollis; and claim 5 under 35 U.S.C. § 103(a) as unpatentable over Hollis.

DECISION

Accordingly, the decision of the Examiner to reject claims 3-9 is reversed.

REVERSED

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