

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* CHRISTOPHER L. WASDEN, AARON THORNTON,  
JEFF HARRISON, and JON BIRCK

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Appeal 2008-1401  
Application 10/438,738  
Technology Center 3700

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Decided: June 24, 2008

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Before DONALD E. ADAMS, DEMETRA J. MILLS, and ERIC GRIMES,  
*Administrative Patent Judges.*

GRIMES, *Administrative Patent Judge.*

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134 involving claims to a system for conducting hearing tests. The Examiner has rejected the claims as anticipated. We have jurisdiction under 35 U.S.C. § 6(b). We reverse.

BACKGROUND

“Traditionally, hearing tests are conducted in a clinical setting by a hearing health professional, such as an audiologist, who administers the hearing tests manually” (Spec. 3). Testing that “involve[s] providing a sound, such as a pure tone or speech, to the ear of the patient and

determining whether the patient can hear or distinguish the sound, are referred to collectively as ‘audiometry,’ or ‘audiometric testing.’… Other types of hearing testing include acoustic immittance testing, which includes tympanometric testing and acoustic reflex testing, and otoacoustic emission testing” (Specification 3-4).

The Specification discloses a “system for conducting an audiometric test and at least one of, and preferably both of, an acoustic immittance test and an otoacoustic emission test in a first ear of a patient” comprising “a first insertion probe having a sealing surface for engaging the external auditory canal of the first ear and providing an airtight seal” and preferably comprising “a first transducer for providing an audiometric test sound and at least one of, and preferably both of, an acoustic immittance test sound and an otoacoustic emission test sound to the first ear through the first insertion probe” (*id.* at 9).

## DISCUSSION

### 1. CLAIMS

Claims 1-5, 7-10, 12-16, 18 and 19 are pending and claims 12, 14-16, and 18 are on appeal. Claims 1-5, 7-10 and 19 have been indicated to be allowable and claim 13 stands as being objected to. Claim 14 is representative and reads as follows:

Claim 14: A system for conducting an audiometric hearing test and a second hearing test selected from the group consisting of an otoacoustic emission hearing test and an acoustic immittance hearing test in a first ear of a patient, said system comprising:

a first insertion probe comprising a sealing surface for engaging the external auditory canal of said first ear and providing an airtight seal within said canal;

a first transducer for providing to said first ear through said insertion probe an audiometric test sound and an acoustic immittance test sound;

a second transducer for receiving from said first ear through said insertion probe a second hearing test result sound comprising an acoustic immittance test result sound;

and a third transducer for receiving an otoacoustic emission sound.

## 2. ANTICIPATION

Claims 12, 14-16, and 18 stand rejected under 35 U.S.C. § 102(e) as anticipated by Stone.<sup>1</sup>

The Examiner finds that “Stone teaches a system that is capable of conducting an audiometric hearing test and a second, acoustic immittance or otoacoustic emission hearing test in a first ear of a patient” and that the disclosed system meets all the structural limitations of claim 14 (Answer 3).

Appellants argue that “Stone does not disclose a device with components for conducting three types of hearing tests (*i.e.*, audiometric, acoustic immittance and otoacoustic emission) in a single ear” (App. Br. 7). Appellants further argue that “the Examiner referred to microphone (50b), which is actually for testing the patient’s *second ear*, in combination with ... elements 58a and 50a,” both of which “relate to the test assembly for the patient’s *first ear*,” and that the “microphone (50b) of *Stone* is not configured to receive an otoacoustic emission sound from the patient’s *first ear*, as claim 14 requires” (*id.*).

The Examiner reasons that the preamble’s “recitation ‘in a first ear’ has not been given patentable weight. ... A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process

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<sup>1</sup> Stone, US 6,368,288B2, Apr. 9, 2002.

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steps or structural limitations are able to stand alone.” (Answer 4, citing *In re Hirao*, 535 F.2d 67 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152 (CCPA 1951).)

Appellants argue that the “recited limitations in the body of claim 14 refer to the preamble terms, and the preamble terms give life, meaning and vitality to the claim as a whole” and thus the “the preamble recitations of claim 14 directing that the system be one for testing ‘in a first ear’ must be deemed a structural limitation of the claim” (Appeal Br. at 9-10).

We agree with Appellants that Stone does not support a *prima facie* case of anticipation for claim 14. In particular, we agree that the preamble is entitled to weight in determining the scope of the claim, and that the Examiner has not adequately explained how the reference shows that the third transducer functions in conjunction with a first ear.

“[A] claim preamble has the import that the claim as a whole suggests for it. In other words, when the claim drafter chooses to use *both* the preamble and the body to define the subject matter of the claimed invention, the invention so defined, and not some other, is the one the patent protects.”

*Bell Commc ’ns Research Inc. v. Vitalink Commc ’ns Corp.*, 55 F.3d 615, 620 (Fed. Cir. 1995).

We agree with Appellants that the preamble of claim 14 helps to define the subject matter of the claimed invention. The preamble of claim 14 recites a “system for conducting an audiometric hearing test and a second hearing test selected from the group consisting of an otoacoustic emission hearing test and an acoustic immittance hearing test in a first ear of a patient.” In order to accomplish the result set out in the preamble – conducting different hearing tests in the same ear – the structure defined by

the body of the claim must be capable of administering the different tests to the same ear. Thus, it is reasonable to interpret claim 14 to require the “third transducer” to be capable of receiving an otoacoustic emission sound from the same ear (the “first ear”) tested by the first and second transducers.

Reading claim 14 in light of the Specification confirms this interpretation. The Specification states that, in a preferred embodiment, the system entails a “first transducer [that] comprises at least one speaker for delivering test sounds to the first ear, and the second and third transducers comprise microphones for receiving, respectively, otoacoustic emission sounds and acoustic emission test result sounds from the first ear” (Spec. at 10, ll. 15-18). The Specification also that “an insertion probe of the present invention can be used to conduct an audiometric hearing test, an acoustic immittance hearing test, and an otoacoustic emission hearing test without changing probes and without removing the insertion probe from the ear” (Spec. at 13, ll. 5-8). We therefore interpret the preamble of claim 14 to limit the claimed system to one having a transducer for providing signal and two transducers for receiving signal in conjunction with the same ear.

Stone discloses an “acoustic coupling device for a hearing screening device comprising … at least a first earpiece disposed proximate the cavity of at least one of said subject's ears having a stimulus input [i.e., first transducer] …, the earpiece further including a response signal output [i.e., second transducer] adapted to receive and transmit the response signal” (Stone, abstract). With regard to the microphones cited by the Examiner as being the second and third transducers for receiving signal (i.e. 50a and 50b), Stone provides that “a stimulus is presented to each of the subject's ears via input leads 52a, 52b and earpieces 36a, 36b. The stimuli are sensed

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and substantially simultaneously transmitted into and through leads 52a, 52b and communicated to microphones 50a, 50b via output leads 54a, 54b” (Stone at col. 4, l. 64 thru col. 5, l. 1; Fig. 3A).

Thus, in Stone’s system, the “a” components stimulate and detect the response in one ear, while the “b” components stimulate and detect the response in the other ear. We agree with Appellants that the Examiner has not adequately shown that the cited reference discloses a third transducer that functions in conjunction with the same ear as the first and second transducer.

We therefore agree with Appellants that the Examiner has not set forth a valid *prima facie* case of anticipation of claim 14 based on the cited reference. We reverse the rejection of claim 14. Claims 12, 15, 16, and 18 depend on claim 14; we therefore reverse the rejection of these claims as well.

REVERSED

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