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EXAMINER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte ROBERT HUGHES JONES

Appeal 2010-009135
Application 11/576,946
Technology Center 2800

Before MAHSHID D. SAADAT, DEBRA K. STEPHENS, and MIRIAM L. QUINN, *Administrative Patent Judges*.

STEPHENS, *Administrative Patent Judge.*

DECISION ON APPEAL

Appellant appeals under 35 U.S.C. § 134(a) (2002) from a non-final rejection of claims 1-7, 12, and 13. We have jurisdiction under 35 U.S.C. § 6(b). Claims 8-11 have been canceled.

We AFFIRM.

Introduction

According to Appellant, the invention relates to a sensor unit comprising four uniaxial sensors capable of detecting a movement component along a respective axis having a respective orientation. The sensors are arranged such that the angles between any two of the respective orientations of the respective axes are substantially equal and are arranged such that in use the respective axes are at substantially the same angle to the vertical. (Abstract).

STATEMENT OF THE CASE

Exemplary Claim

Claim 1 is an exemplary claim and is reproduced below:

1. A sensor unit comprising four uniaxial geophones each disposed on different axes and capable of detecting a movement component along a respective axis having a respective orientation and arranged such that the angles between any two of said respective orientations of said respective axes are substantially equal, wherein the uniaxial sensors are arranged such that in use the respective axes are at substantially the same angle to the vertical.

Reference

Seymour	US 4,791,617	Dec. 13, 1988

Rejection

Claims 1-7, 12, and 13 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Seymour.

We have only considered those arguments that Appellant actually raised in the Brief. Arguments Appellant could have made but chose not to make in the Brief have not been considered and are deemed to be waived. *See* 37 C.F.R. § 41.37(c)(1)(vii)(2011).

ISSUE

35 U.S.C. § 103(a): claims 1-7, 12, and 13

Appellant asserts the invention is not obvious over Seymour because Seymour does not disclose the configuration "wherein the uniaxial sensors are arranged such that in use the respective axes are at substantially the same angle to the vertical" (App. Br. 11). Specifically, Appellant contends that although Seymour discloses a regular tetrahedron with equilateral sides that might be used as the shape for the mercury filled cavity, Seymour fails to disclose that sensors can be arranged such that their axes are at substantially the same angle to the vertical (App. Br. 11).

Appellant further argues Seymour teaches geophones having negative characteristics, and, thus, Seymour teaches away from the use of geophones (*id.*). Moreover, according to Appellant, Seymour discloses a sensor having one intertial mass in contrast to the geophone unit, which has several intertial masses (*id.*). Appellant continues that pressure sensors in Seymour's sensor unit will have different orientations relative to the vertical

depending on the orientation of the tool or housing being used – not on the orientation of a tetrahedron relative to an axis, or that this particular configuration is obtained or retained during use (App. Br. 11-12).

Issue 1: Has the Examiner erred in finding Seymour teaches or suggests "wherein the uniaxial sensors are arranged such that in use the respective axes are at substantially the same angle to the vertical," as recited in claim 1?

Issue 2: Has the Examiner erred because Seymour teaches away from using geophones?

ANALYSIS

We agree with the Examiner's findings and conclusion that Seymour teaches or suggests "wherein the uniaxial sensors are arranged such that in use the respective axes are at substantially the same angle to the vertical," and adopt them as our own.

We further agree with the Examiner that Seymour does not teach away from the present invention. Indeed, we are not persuaded a person of ordinary skill, upon reading Seymour, would be discouraged from following the path set out in the references or would be led in a direction divergent from the path that was taken by Appellant. *Ricoh Co., Ltd. v. Quanta Computer, Inc.*, 550 F.3d1325, 1332 (Fed. Cir. 2008). Instead, Seymour discusses geophones and the limitations of geophones, as well as the limitations of other pressure responsive devices, such as piezo-electric stress sensors (col. 1, ll. 23-65). Indeed, Seymour does not exclude the use of

geophones as a pressure responsive device, and, additionally, indicates the disclosed pressure responsive means may be "any other suitable pressure sensitive devices" (col. 3, ll. 29-31). Therefore, we find Seymour does not teach away since it merely expresses a general preference for one type of sensor over another.

Accordingly, Appellant has not persuaded us the Examiner erred in finding Seymour teaches or suggests the invention as recited in independent claim 1, commensurately recited independent claim 2, and dependent claims 3-7, 12, and 13, not separately argued. Therefore, the Examiner did not err in rejecting claims 1-7, 12, and 13 under 35 U.S.C. § 103(a) for obviousness over Seymour.

DECISION

The Examiner's rejection of claims 1-7, 12, and 13 under 35 U.S.C. § 103(a) as being unpatentable over Seymour 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) (2011).

AFFIRMED

pgc