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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte MIROSLAW BOBER and RAMONA ZAHARIA

Appeal 2010-001524
Application 10/838,370
Technology Center 3600

Before CARL W. WHITEHEAD, JR., ERIC S. FRAHM, and
ANDREW J. DILLON, *Administrative Patent Judges*.

DILLON, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

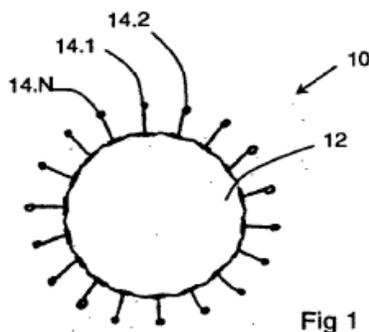
Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's rejections of claims 1-6 and 8-13:

1. Claims 1-6 and 8-13 stand rejected under 35 U.S.C. 112, ¶ 2, as indefinite.
2. Claims 1-6 and 8-13 stand rejected under 35 U.S.C. 102(e) as anticipated by Takafuji (US 2003/0154805 A1).

We reverse and enter a new ground of rejection.

THE INVENTION

Appellants disclose a “spatially continuous” sensor that “provides measurements which are each affected by force applied substantially anywhere to the sensor.” (Spec. 4:7-15.) Appellants' Fig. 1, reproduced below, shows an exemplary sensor 10 having a circular pad 12 and perimeter ring of electrodes 14.1-14.N. (Spec. 6:12-7:2.)



Appellants' Fig. 1 is a plan view of the disclosed invention's sensor.

The electrical resistance of the pad material 12 changes in accord with its compression, such that the resistance between any given two electrodes 14.1-14.N is “a respective function of the force distribution on the pad.” (Spec. 7:3-8.) Appellants place the sensor 10 within a vehicle seat. (Spec.

1:3-5.) Resistances are measured and recorded between multiple electrode pairs 14.1-14.N for known seat occupants. (Spec. 7:18-8:8.) The recorded resistances are compared against real-time measurements to assess the class of a present occupant, *e.g.*, child or adult. (Spec. 8:15-9:21.)

Claim 1 is the only independent claim¹ and sets forth the invention as follows:

1. A method of monitoring a seat occupant which includes the steps of:

for at least one sensor reactive to a force distribution applied on the seat by the seat occupant at a given point in time,

making a plurality of measurements, with each measurement being dependent on the force distribution as applied over substantially all the associated sensor at the given point in time in accordance with a respective different function,

whereby said plurality of measurements is representative of said force distribution as applied over substantially all the associated sensor, and

classifying the seat occupant on the basis of said force distribution as represented by said plurality of measurements for each of said at least one sensor.

INDEFINITENESS REJECTION

The Examiner rejects claims 1-6 and 8-13 as indefinite because (Ans. 3):

Claim 1 recites the limitation “the associated sensor” in claim 1. There is insufficient antecedent basis for this limitation in the claim.

¹ Claim 13 does not technically depend from claim 1, but is rather an “apparatus ... adapted to carry out the method of any preceding claim.”

We agree that “the associated sensor” lacks explicit antecedent basis. However, a lack of explicit antecedent basis does not render a claim indefinite *per se*. Rather, if a skilled artisan could nonetheless reasonably ascertain the claim scope, the claim is not indefinite. *See Energizer Holdings, Inc. v. Int’l Trade Comm’n*, 435 F.3d 1366, 1370-71 (Fed. Cir. 2006). The Examiner never explains why the lack of explicit antecedent basis renders the claim scope unascertainable.

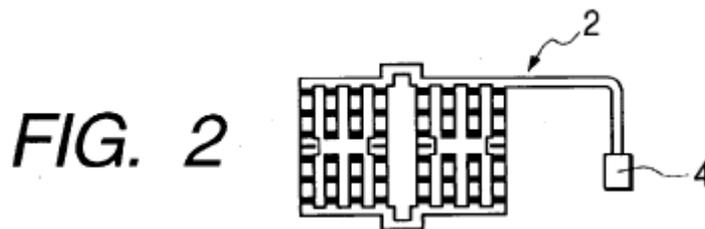
Accordingly, we do not sustain the indefiniteness rejection.

ANTICIPATION REJECTION

Claims 1-6 and 8-13 stand rejected as anticipated by Takafuji.

Findings for Takafuji

Takafuji discloses a sensor for detecting the class of a vehicle seat occupant, *e.g.*, unoccupied, adult, or child. (Takafuji, Abstract; Fig. 4.) Takafuji’s Fig. 2, reproduced below, shows an exemplary sensor 2 having a matrix of pressure-sensitive pads (“N x M ... pressure-sensitive devices”). (Takafuji ¶¶ 55, 93, and 106.)



Takafuji’s Fig. 2 is a plan view of the sensor (labeled, “2”).

Using the pads’ pressure readings, Takafuji’s sensor 2 measures the occupant’s weight (*e.g.*, as a sum or average of the pads’ pressure readings) and two-dimensional pattern (*e.g.*, as a detected profile of the

buttocks/thighs) to ascertain the occupant's class. (Takafuji, ¶¶ 93, 104-111.)

Analysis

Appellants argue that the following features are required by claim 1 and distinguish the claimed invention over Takafuji (App. Br. 7):

As recited in claim 1, a plurality of measurements are made at a given point in time with each measurement being dependent on the force distribution as applied over substantially all the associated sensor at the given point in time and in accordance with a respective different function, whereby the plurality of measurements is representative of the force distribution as applied over substantially all of the associated sensors.

Appellants further argue that Takafuji's occupant weight measurements, which the Examiner cites as solely constituting the claimed "plurality of measurements," fails to meet the above features of claim 1. (App. Br. 9 (citing Ans. 3)). We agree with Appellants' arguments in the following respects.

Claim 1 requires a "plurality of measurements" that: (i) are performed simultaneously ("at a given point in time"); (ii) represent a force distribution ("representative of said force distribution"); and (iii) differently depend on the force distribution ("in accordance with a respective different function").² Takafuji's occupant weight measurements do not meet any of these

² Note the steps of claim 1 are performed by "at least one sensor." Thus, "the associated sensor" of claim 1 refers to the "at least one sensor," and, the requirements (i) to (iii) may be accordingly satisfied by more than one sensor. For convenience, our analysis will describe the "associated sensor" as single sensor taught by Takafuji's sensor 2, but we do not find no such required one-to-one correspondence.

requirements. Rather, the measurements are identically calculated from the occupant's weight distribution, one-by-one, as a sum or average of the pressure pads' readings (which are simultaneous). (*See* "Findings for Takafuji," *supra*, pp. 4-5.) Thus, the sensed weight measurements fail to satisfy requirement (i) by way of being calculated one-by-one, not simultaneously; fail to satisfy requirement (ii) by way of representing the weight value, not the occupant's weight distribution; and fail to satisfy requirement (iii) by way of being identically calculated, not differently calculated, from the weight distribution.

In view of the above errors, the Examiner's anticipation rejection of claims 1-6 and 8-13 over Takafuji is not sustained.

NEW GROUNDS OF REJECTION

We enter the following new ground of rejection pursuant to our authority under 37 C.F.R. § 41.50(b).

35 U.S.C. § 102

Because Takafuji's sensor 2 meets requirements (i) to (iii), presented above, we enter a new ground of rejection for claim 1 under 35 U.S.C. § 102(e). We make no assessment of whether the remaining claims distinguish over Takafuji, but rather leave the Examiner to address that matter in light of our below findings. *See* MPEP § 1213.02.

Turning to the three requirements (i) to (iii), Takafuji's sensor 2 simultaneously measures the occupant's weight and pattern ("plurality of measurements"), thus satisfying the first requirement (i). The measured weight and pattern collectively represent the occupant's weight distribution ("force distribution"), thus satisfying the second requirement (ii). And, the

measured weight and pattern are different aspects of the weight distribution, thus differently depending on the weight distribution in satisfaction of the third requirement (iii). Note that Takafuji's sensor 2 also monitors and classifies the occupant based on the determined weight distribution ("monitoring a seat occupant" and "classifying the seat occupant on the basis of said force distribution," as claimed). (*See* findings for Takafuji, *supra*, pp. 4-5.)

Appellants present two arguments that can be applied, albeit unpersuasively, to our above findings. First, Appellants argue that the pressure pads of Takafuji's sensor 2 "measur[e] a force at a given position of the pressure-sensitive sensor *independently* of the force at other positions on the sensor." (Reply Br. 3.) We agree. However, claim 1 does not preclude the recited sensor from having discrete regions of pressure detection. Claim 1 merely requires that each of the recited measurements is dependent on a force distribution as a whole, which is taught by Takafuji in the manner stated above. Note that Appellants' argument would have merit if claim 1 required "measurements which are spatially continuous representations of [the] force distribution" (Spec. 4:7-9). However, claim 1 recites no such requirement.

Second, Appellants argue that the Examiner relied on separately described embodiments and modifications of Takafuji. (App. Br. 8.) While Takafuji describes "embodiments" and "modifications" under respective headings, the reference must be considered for everything it teaches by way of technology. *See EWP Corp. v. Reliance Universal Inc.*, 755 F.2d 898, 907 (Fed. Cir. 1985). Our findings, above, properly rely on the second embodiment's matrix of pressure-sensitive pads (Takafuji, ¶ 93) and the

third embodiment's clear use of that matrix to sense the occupant's weight and pattern (Takafuji, ¶ 104).

DECISION

The Examiner's decision rejecting claims 1-6 and 8-13 is reversed.

Pursuant to our authority under 37 C.F.R. § 41.50(b), we enter a new ground of rejection for claim 1 under 35 U.S.C. § 102(e).

37 C.F.R. § 41.50(b) provides that "[a] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review" and that Appellants must, **WITHIN TWO MONTHS FROM THE DATE OF THE DECISION**, exercise one of the following two options to avoid termination of this appeal as to the rejected claims:

- (1) Reopen prosecution. Submit an appropriate amendment of the claims so rejected or new evidence relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the proceeding will be remanded to the examiner....
- (2) Request rehearing. Request that the proceeding be reheard under § 41.52 by the Board upon the same record.

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).

REVERSED

37 C.F.R. § 41.50(b)

peb