

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 18

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte SHIGENORI ANDO

Appeal No. 1998-0647
Application 08/414,004

ON BRIEF¹

Before THOMAS, KRASS and BLANKENSHIP, Administrative Patent Judges.

THOMAS, Administrative Patent Judge.

DECISION ON APPEAL

Appellant has appealed to the Board from the examiner's final rejection of claims 1 through 16, which constitute all

¹The Appellant's requested oral hearing, set for July 10, 2000, was waived in a facsimile communication received on June 5, 2000.

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of the claims in the application.

Representative claim 1 is reproduced below:

1. A spindle apparatus comprising:

a rotary shaft;

magnetic bearing means for floatingly holding the rotary shaft by magnetic forces; and

a combined motor and magnetic bearing device for imparting a rotational torque to the rotary shaft and for positionally controlling the rotary shaft by magnetic forces.

The following reference is relied upon by the examiner:

Kawashima	5,093,754	Mar.
3, 1992		

Claims 1 through 16 stand rejected under 35 U.S.C. § 102 as being fully anticipated by Kawashima.

Rather than repeat the positions of the appellant and the examiner, reference is made to the briefs and the answer for the respective details thereof.

OPINION

We reverse.

The key feature in dispute among each independent claims 1, 2 and 10 on appeal is the feature set forth as the last

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clause of the representative independent claim 1 on appeal:

a combined motor and magnetic bearing device for imparting a rotational torque to the rotary shaft and for positionally controlling the rotary shaft by magnetic forces.

A similar, slightly more detailed version of this feature is recited in independent claim 2 with a still more detailed version and additional limitations in independent claim 10.

This claimed feature reflects the disclosed version of:

The magnetic bearing composite motor 52 is one which is composed of the motor function for imparting the rotational force to the rotary shaft 32 and the magnetic bearing function for magnetically floating and positionally controlling the rotary shaft 32.
(Specification page 8, lines 1-5)

Consistent with appellant's arguments and the disclosure, a single device providing both motor and magnetic bearing functions is disclosed and recited in conformable language in each independent claim on appeal. Page 6 of the reply brief even characterizes the disclosed magnetic bearing composite motor 52 as an integrated structure, separate and apart from the electro- magnets 34, 35, 36, 37 for radial magnetic bearing purposes and separate and apart from the electromagnets 46, 47 for axial magnetic bearing purposes.

The final rejection and answer characterizes the

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examiner's common view that the claimed rotary shaft is the rotor 1 of Figure 1 of Kawashima and the magnetic bearing means in turn comprises electromagnets 2a, 2b. The examiner takes the additional view at page 4 of the answer that the rotor 1 also comprises the motor of the claim and that the same electromagnets 2a, 2b provide the magnetic bearings associated therewith, thus, meeting the feature of "a combined motor and magnetic bearing device." We disagree. To the extent that the combined motor and the magnetic bearing device of the claim may comprise rotor 1 and electromagnets 2a, 2b of Kawashima, there is no remaining teaching or showing of the reference to comprise the claimed rotary shaft and the magnetic bearing means of representative independent claim 1 on appeal. The examiner can't have it both ways.

The examiner does not rely upon the feature at column 3, lines 49-52 that "the rotor 1 is rotated by an unillustrated induction motor while being held afloat in accordance with the target value (C)" which has been computed to be the midpoint between two limit positions in accordance with the logic of the flow chart in Figure 2 of Kawashima. Again, even according to this teaching of a separate motor in addition to

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the rotor shaft 1 of Kawashima, there is no additional teaching of the claimed magnetic bearings associated with this unillustrated induction motor separate from the magnetic bearings 2a, 2b.

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In view of the foregoing, it is clear that there can be no clear anticipation of even the broad representative independent claim 1 on appeal in accordance with the teachings and showings in Kawashima. Since the feature of independent claim 1 of "a combined motor and magnetic bearing device" etc. is similarly reflected in each of the remaining independent claims 2 and 10 on appeal, we must reverse the rejection of all claims on appeal under 35 U.S.C. § 102. As such, the decision of the examiner is reversed.

REVERSED

JAMES D. THOMAS)
Administrative Patent Judge)
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) BOARD OF PATENT
ERROL A. KRASS) APPEALS
Administrative Patent Judge) AND
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INTERFERENCES)
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HOWARD B. BLANKENSHIP)
Administrative Patent Judge)

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