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 SCOTT DAVID PAUL, MARK EDGAR MONTGOMERY, and MARK STEVEN JOHNSON

Appeal No. 2006-1479
Application No. 10/324,660
Technology Center 3600

Decided: March 12, 2007

Before ANITA PELLMAN GROSS, JENNIFER D. BAHR, and STUART S. LEVY, *Administrative Patent Judges*.

BAHR, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Scott David Paul et al. (Appellants) appeal under 35 U.S.C. § 134 from the Examiner's decision rejecting claims 1, 3-11, and 13-21, all the claims pending in the application. We have jurisdiction over this appeal under 35 U.S.C. § 6.

We AFFIRM.

Appellants' invention is a system and method for eliminating wafer protrusion in a semiconductor furnace. The system and method utilizes a wafer press coupled to a cylinder for applying force to reposition one or more wafers protruding from one or more cassettes. Independent claim 1 is representative of the claimed invention and reads as follows:

> 11. A method for eliminating wafer protrusion, comprising:
>
> placing a plurality of wafers in one or more cassettes, each cassette configured to store a plurality of wafers in a stocker system;
>
> placing the cassette on a shelf of the stocker system, the stocker system configured to receive a plurality of cassettes stacked vertically on a plurality of shelves; and
>
> activating a wafer press operable to apply a force to the wafers protruding from the one or more cassettes to reposition the wafers in the one or more cassettes, wherein said wafer press is activated by coupling the wafer press to a cylinder; and
>
> adjusting the pressure in the cylinder to change the location of the wafer press.

The Examiner relies upon the following as evidence of unpatentability:

McPhail	US 3,554,114	Jan. 12, 1971
Iwai	US 5,562,383	Oct. 08, 1996
Kaneda (as translated)	JP 10-242095	Sep. 11, 1998
Pavloski	US 5,844,683	Dec. 01, 1998
Kikuchi	US 5,970,818	Oct. 26, 1999

Appellants' argument that only the Abstract of Kaneda is of record and that the translation of the Kaneda reference[1] is not of record and cannot be relied upon (Reply 1) is incorrect. It is clear from the Notice of References Cited (PTO-892) attached to the Office Action mailed September 29, 2004 that the Kaneda document (JP 10-242095), not the Abstract of the document, is of record and relied upon by the Examiner. *See* Manual of Patent Examining Procedure (MPEP) § 707.05(e) – II.

Appellants seek review of the Examiner's rejections under 35 U.S.C. § 103(a) of claims 1, 3, 4, 7, 8, 10, 11, 13, 14, 16, 18, 19, and 21 as being unpatentable over Kaneda in view of Iwai and McPhail, claims 6, 9, 17, and 20 as being unpatentable over Kaneda in view of Iwai, McPhail and Pavloski, and claims 5 and 15 as being unpatentable over Kaneda in view of Iwai, McPhail and Kikuchi.

The Examiner provides reasoning in support of the rejections in the Answer (mailed January 11, 2006). Appellants present opposing arguments in the Brief (filed September 28, 2005) and Reply Brief (filed February 22, 2006).

[1] The Examiner attached to the Answer a machine translation of Kaneda furnished by the Japanese Patent Office website.

OPINION

With respect to the rejection based on Kaneda in view of Iwai and McPhail, Appellants have argued all of the claims together. Therefore, in accordance with 37 C.F.R. § 41.37(c)(1)(vii), we have selected independent claim 11 as the representative claim to decide the appeal of this rejection, with claims 1, 3, 4, 7, 8, 10, 13, 14, 16, 18, 19, and 21 standing or falling with claim 11.

The Examiner determines that Kaneda as modified by Iwai would have suggested the subject matter of claim 11 with the exception of the wafer press being activated by coupling it to a cylinder (Answer 4-5). Appellants do not contest this determination. Appellants do contest the Examiner's further determination that it would have been obvious, in view of McPhail, to couple the pushing member 35 of Kaneda to a cylinder to actuate the pushing member 35. Specifically, Appellants allege that McPhail is non-analogous art (Br. 5) and that, therefore, there can be no suggestion to combine McPhail with Kaneda and Iwai (Br. 6). Appellants do not contest that, if the references were combined as proposed by the Examiner, the subject matter of claim 11 would result. Accordingly, the sole issue before us is whether McPhail is analogous prior art to Appellants' invention.

Two criteria have evolved for determining whether prior art is analogous: (1) whether the art is from the same field of endeavor, regardless of the problem addressed, and (2) if the reference is not within the field of the inventor's endeavor, whether the reference still is reasonably pertinent to

the particular problem with which the inventor is involved. *In re Clay*, 966 F.2d 656, 658-59, 23 USPQ2d 1058, 1060 (Fed. Cir. 1992). *See also In re Deminski*, 796 F.2d 436, 442, 230 USPQ 313, 315 (Fed. Cir. 1986); *In re Wood*, 599 F.2d 1032, 1036, 202 USPQ 171, 174 (CCPA 1979).

Even assuming that McPhail is not considered to be from Appellants' field of endeavor, McPhail does address the problem of providing a linear actuator to selectively actuate linear movement when a certain condition is detected. In particular, McPhail provides actuators 74, 76, 78, 80 comprised of pneumatic expansible-chamber actuators (cylinders) with connecting rods 82, 84, 88, 90 (col. 4, ll. 47-63). The actuators 74, 76, 78, 80 communicate with a suitable source of compressed gas (col. 4, ll. 71-72) and are controlled by suitable electromechanical control units 96, 98, 100, 102 (col. 4, ll. 73-75). Appellants likewise are concerned with providing at least one linear actuator to selectively actuate the at least one wafer press 12 when wafer protrusion is detected. We therefore conclude that McPhail is reasonably pertinent to the problem of selectively operable linear actuation with which Appellants were involved. Accordingly, McPhail is analogous prior art to Appellants' invention.

The motivation to combine particular references may come "from the nature of the problem to be solved, leading inventors to look to the references relating to possible solutions to that problem." *Pro-Mold & Tool Co. v. Great Lakes Plastics, Inc.*, 75 F.3d 1568, 1573, 37 USPQ2d 1626, 1630 (Fed. Cir. 1996); *see also In re Huang*, 100 F.3d 135, 139 n.5, 40 USPQ2d 1685, 1688 n.5 (Fed. Cir. 1996).

Kaneda discloses that, when a protruding or "flash" wafer is detected, pushing member 35 is moved to push the wafer back into the cassette (Translation [MEANS] 4). Kaneda does not specify, however, the type of actuator used to move pushing member 35 in the pushing direction, leaving one skilled in the art to select a known linear actuator to provide such pushing motion. As evidenced by McPhail, cylinders, or pneumatic expansible-chamber actuators, were well known linear actuators in the prior art at the time of Appellants' invention. Accordingly, it would have been obvious to one of ordinary skill in the art to couple a cylinder, a known linear actuator, to the pushing member 35 of Kaneda to move the pushing member to push a protruding wafer into the cassette.

In light of the above, we conclude that Appellants have not demonstrated that the Examiner erred in rejecting claim 11 as being unpatentable over Kaneda in view of Iwai and McPhail. We thus sustain the rejection of claim 11 and claims 1, 3, 4, 7, 8, 10, 13, 14, 16, 18, 19, and 21 standing or falling with claim 11.

We also sustain the rejections of claims 6, 9, 17, and 20 as being unpatentable over Kaneda in view of Iwai, McPhail and Pavloski, and claims 5 and 15 as being unpatentable over Kaneda in view of Iwai, McPhail and Kikuchi since Appellants have not challenged these rejections with any reasonable specificity apart from the rejection of claim 11 (*see In re Nielson*, 816 F.2d 1567, 1572, 2USPQ2d 1525, 1528 (Fed. Cir. 1987)).

SUMMARY

The decision of the Examiner to reject claims 1, 3-11, and 13-21 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). *See* 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

vsh

TEXAS INSTRUMENTS INCORPORATED
P O BOX 655474, M/S 3999
DALLAS, TX 75265