

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 22

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte SATOSHI KADOHATA, JUN YAMAUCHI and YASUHIRO KASHIWAGI

Appeal No. 2002-0964
Application 09/000,850

ON BRIEF

Before ABRAMS, PATE, and STAAB, Administrative Patent Judges.

PATE, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 7 through 30. Claims 1 through 6 have been canceled. These are all the claims in the application.

The claimed invention is directed to a method and apparatus for picking up and placing electronic components on a circuit board. The improvement of the claimed subject matter is that the pickup nozzles used to place the components, when placed in the nozzle holders, are replaced by a nozzle in an adjacent

Appeal No. 2002-0964
Application 09/000,850

compartment in the holder for the next successive step in the placement process.

The claimed subject matter may be further understood with reference to the appealed claims appended to appellants' brief.

The references of record relied upon as evidence of obviousness are:

Sakurai	5,377,405	Jan. 3, 1995
Terai	JP 0132897 ¹	May 22, 1990

THE REJECTIONS

Claims 7 through 10, 12, 13, and 22 through 25 stand rejected under 35 U.S.C. § 102(b) as anticipated by Terai.

Claims 11, 14 through 21, and 26 through 30 stand rejected under 35 U.S.C. § 103 as unpatentable over Terai in view of Sakurai.

For the details with respect to the examiner's rejections, reference is made to the examiner's answer for the full details thereof.

Reference is also made to the appeal brief and reply brief for the appellants' arguments in response thereto.

¹Our understanding of the Japanese document is via the official PTO translation and the second translation filed by the appellants.

OPINION

We have carefully reviewed the rejections on appeal in light of the arguments of the appellants and the examiner. As a result of this review, we have reached the conclusion that the applied prior art establishes the prima facie obviousness of claims 7, 8, 10-13, 22, 23, 25, 26 and 30. The prior art does not establish the prima facie obviousness of claims 9, 14-21, 24, 27, 28 and 29. Additionally, a rejection under 37 CFR § 1.196(b) has been entered against claims 26, 29 and 30. Our reasons follow.

The following comprises our findings of fact as to the scope and content of the prior art and the differences between the prior art and the claimed subject matter. With respect to the Japanese document of Terai there are several translations of record in the application file. We have consulted both the official PTO translation and the certified translation filed by appellants as an attachment to Paper No. 15, filed November 14, 2000 for our findings of fact outlined below.

Terai discloses an apparatus and method for mounting a plurality of electronic components on a circuit board. Referring to figure 1, a movable transfer head 1 is provided for selecting one of a plurality of nozzles. Each of the nozzles is capable of picking up a select set of the plurality of electronic components

from a parts storage and feeding device 6, 7. A nozzle stocker 8 has a plurality of compartments each of which are utilized to store one of the plurality of nozzles 2. The compartments are in a straight line, and the holder 8 is oblong. The number of compartments in the stocker 8 are unspecified, and presumably this number depends on the number of types of components to be mounted at this station of the conveyor 4. Appellants' prior art Figure 7 shows 6 compartments. Terai discloses 5 compartments but only 4 parts storage and feeding devices. These exact numbers are taken as exemplary only. Terai discloses a mounting data memory device for storing a predetermined mounting sequence of the electronic components, and Terai discloses a nozzle stock position memory device for storing data identifying which compartments hold which nozzles. Both translations agree on this point. As appellants' certified translation states, "The nozzles that are not in use are placed in the holder in predetermined order." Page 1, lines 25-26. Finally, Terai discloses some sort of controller to move the transfer head to the correct location.

We are in agreement with appellant that Terai does not explicitly state that he always moves the transfer head to the next adjacent compartment of the nozzle stocker after all desired

Appeal No. 2002-0964
Application 09/000,850

components have been placed by the first nozzle. However, Terai is considered as suggestive of using a stocker 8 with two or more compartments. For the plurality of nozzle compartments consisting of two compartments, the next nozzle to be selected by Terai is always in an adjacent compartment of the nozzle stocker. Consequently, Terai anticipates at least one embodiment within the scope of appellants' claims 7, 8, 11-13, 22, 23, 26 and 30. These claims require a plurality. Two is a plurality and it is considered as within the scope of Terai's disclosure. For claims 10 and 25 note that if there are only two compartments, the compartments store the nozzles in sequence of use.

However, we do not affirm the obviousness rejection of the following claims: claims 9, 14-21, 24, 27, 28 and 29. As to claims 14-21, 27, 28 and 29, we are in agreement with appellants that while Sakurai discloses multiple movable heads, it does not teach multiple nozzles for each of the multiple heads.

Pursuant to our authority under 37 CFR § 1.196(b) we enter the following rejection. Claims 26, 29 and 30 are rejected under 35 U.S.C. § 112, second paragraph, as indefinite. These claims contemplate a nozzle stocker with a plurality of compartments. These compartments are designated compartments 1, 2, ..., n. However, when the nth compartment is n=1, which is clearly a

Appeal No. 2002-0964
Application 09/000,850

possibility given appellants' series, the claims contradict the subject matter claimed in the independent claims they depend from and their own preambles. Appellants' claimed series should clearly start with an integer greater than 1. The examiner should take note that claims 26 and 30 are subject to the affirmed rejection on appeal should the indefiniteness be corrected.

Summary

The rejections of claims 7, 8, 10-13, 22, 23, 25, 26 and 30 have been affirmed.

The rejections of 9, 14-21, 24, 27, 28 and 29 have been reversed.

A rejection under 37 CFR § 1.196(b) has been entered against claims 26, 29 and 30.

In addition to affirming the examiner's rejection of one or more claims, this decision contains a new ground of rejection pursuant to 37 CFR § 1.196(b) (amended effective Dec. 1, 1997, by final rule notice, 62 Fed. Reg. 53,131, 53,197 (Oct. 10, 1997), 1203 Off. Gaz. Pat. & Trademark Office 63,122 (Oct. 21, 1997)). 37 CFR § 1.196(b) provides, "A new ground of rejection shall not be considered final for purposes of judicial review."

Appeal No. 2002-0964
Application 09/000,850

Regarding any affirmed rejection, 37 CFR § 1.197(b)
provides:

(b) Appellant may file a single request for rehearing
within two months from the date of the original
decision

37 CFR § 1.196(b) also provides that the appellants, WITHIN
TWO MONTHS FROM THE DATE OF THE DECISION, must exercise one of
the following two options with respect to the new ground of
rejection to avoid termination of proceedings (37 CFR § 1.197(c))
as to the rejected claims:

(1) Submit an appropriate amendment of the claims
so rejected or a showing of facts relating to the
claims so rejected, or both, and have the matter
reconsidered by the examiner, in which event the
application will be remanded to the examiner. . . .

(2) Request that the application be reheard under
§ 1.197(b) by the Board of Patent Appeals and
Interferences upon the same record. . . .

Should the appellant elect to prosecute further before the
Primary Examiner pursuant to 37 CFR § 1.196(b)(1), in order to
preserve the right to seek review under 35 U.S.C. §§ 141 or 145
with respect to the affirmed rejection, the effective date of the
affirmance is deferred until conclusion of the prosecution before
the examiner unless, as a mere incident to the limited
prosecution, the affirmed rejection is overcome.

Appeal No. 2002-0964
Application 09/000,850

If the appellant elects prosecution before the examiner and this does not result in allowance of the application, abandonment or a second appeal, this case should be returned to the Board of Patent Appeals and Interferences for final action on the affirmed rejection, including any timely request for reconsideration thereof.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART 1.196(b)

NEAL E. ABRAMS)	
Administrative Patent Judge)	
)	
)	
)	BOARD OF PATENT
WILLIAM F. PATE III)	
Administrative Patent Judge)	APPEALS AND
)	
)	INTERFERENCES
)	
LAWRENCE J. STAAB)	
Administrative Patent Judge)	

NEA:pgg

Appeal No. 2002-0964
Application 09/000,850

McDermott Will & Emery
600 13th Street, N.W.
Washington, DC 20005-3096