

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 47

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte

MASAMITI KOGAI, NOBUO KIHARA, MASAHIRO OSUMI, MASAKATSU  
OHSUGI, YOSHIKAZU FUJIOKA, SEIKICHI YAMAMOTO, and NAOYUKI  
IKEMIZU

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Appeal No. 1998-0253  
Application No. 08/261,252

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HEARD: FEBRUARY 23, 2000

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Before McQUADE, NASE, and GONZALES, Administrative Patent  
Judges.

McQUADE, Administrative Patent Judge.

DECISION ON APPEAL

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Application No. 08/261,252

Masamiti Kogai et al. originally took this appeal from the final rejection of claims 1 and 3 through 12, but have since canceled claims 1, 3, 7 and 10. Thus, the appeal now involves claims 4 through 6, 8, 9, 11 and 12, the only claims presently pending in the application.<sup>1</sup>

The invention relates to "a method for the assembly of automotive vehicles" (specification, page 1). Claim 4 is illustrative and reads as follows:

4. A method for the assembly of a work in a vehicle body assembly line having at least one of a conveyor and a carriage loaded on a guide rail disposed along the vehicle body assembly line, comprising:

mounting the work so as to be supported by a work-supporting means and then aligned by a work-aligning means on said at least one conveyor and carriage;

loading said at least one conveyor and carriage with a plurality of parts;

loading said at least one conveyor and carriage with a plurality of tools;

assembling a part to the work with a part-assembly robot disposed on said at least one conveyor and carriage during a period of time during which the said at least one conveyor and carriage moves and the work is mounted to the said at least one conveyor and carriage, wherein the part is clamped with the part-assembly robot from a pallet disposed on at least one of a conveyor and carriage;

changing the tools of the part-assembly robot in accordance with the parts to be mounted to the work; and

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<sup>1</sup> Each of the claims remaining on appeal has been amended subsequent to final rejection.

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releasing the work from said at least one conveyor and carriage after the assembly of the part with the work by the part-assembly robot.<sup>2</sup>

The prior art items relied upon by the examiner as evidence of obviousness are:

Hamada et al. (Hamada)	4,674,181	Jun. 23, 1987
Monforte	4,781,519	Nov. 1, 1988
Japanese Patent Document <sup>3</sup>	60-33173	Feb. 20, 1985

The prior art automotive vehicle assembly line method described in the background discussion on pages 1 through 7 of the appellants' specification (the admitted prior art).

Claims 4 through 6, 8, 9, 11 and 12 stand rejected under 35 U.S.C. § 103 as being unpatentable over the admitted prior art in view of Hamada.<sup>4</sup>

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<sup>2</sup> The references in claim 4 and the other claims on appeal to a conveyor "and" carriage are inconsistent with the underlying disclosure which describes a conveyor or carriage (element 5). This inconsistency is deserving of correction in the event of further prosecution before the examiner.

<sup>3</sup> An English language translation of this reference, prepared on behalf of the Patent and Trademark Office, is appended hereto.

<sup>4</sup> In the final rejection (Paper No. 25), the examiner also relied on U.S. Patent No. 4,977,667 to Sekimoto et al., now withdrawn as a reference (see page 3 in the main answer, Paper

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Claims 4 through 6, 8, 9, 11 and 12 also stand rejected under 35 U.S.C. § 103 as being unpatentable over the Japanese reference in view of Monforte and Hamada.<sup>5</sup>

Reference is made to the appellants' main and reply briefs (Paper Nos. 31, 34 and 38) and to the examiner's main and supplemental answers (Paper Nos. 32, 35 and 39) for the respective positions of the appellants and the examiner with regard to the merits of these rejections.<sup>6</sup>

In explaining the first rejection, the examiner concedes (see pages 4 and 5 in the main answer) that the admitted prior art assembly line method of loading a vehicle body on a conveyor and then assembling parts to the body via robots located at successive stations fails to respond to a multitude of limitations in independent claims 4, 8 and 11. The

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No. 32), to support this rejection.

<sup>5</sup> The examiner entered this ground of rejection for the first time in the main answer.

<sup>6</sup> The examiner refused to enter an additional reply brief filed by the appellants on December 19, 1996 (Paper No. 36). Accordingly, we have not considered the arguments advanced therein in reviewing the rejections on appeal.

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examiner's reliance on Hamada to cure these deficiencies is not well founded.

Hamada discloses an assembly system designed to efficiently produce relatively small quantities of a variety of different articles. The system includes a moving unit 12 adapted to move around a closed loop track 13, a robot 11 and assembling jigs 14, 14a, 14b mounted on the moving unit, a conveyor 19 for moving trays 20 bearing article components/parts 18a, 18b, 18c, etc. alongside and in synchronism with the moving unit, and stationary peripheral units 21 through 25 located along the closed loop track for performing operations on the parts which the robot cannot perform. In use, the robot moves parts between a tray, the assembling jigs and the peripheral units to assemble and produce an article as the moving unit moves around the closed loop track.

Given the lack of any particular relevance of the Hamada assembly system to a method of assembling parts to an automotive vehicle, we are satisfied that the only suggestion for modifying the admitted prior art automotive vehicle assembly line method in view of Hamada to arrive at the

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methods recited in independent claims 4, 8 and 11 stems from improper hindsight. The examiner's contention that the requisite suggestion flows from a general desire to improve efficiency (see pages 5 and 6 in the main answer) is not sufficient in the present case. Moreover, even if made, the proposed combination would still fail to address the tool loading and changing limitations in claim 4 and the specific robot locating/positioning limitations in claims 8 and 11. There is simply no factual basis in the proposed combination which supports the examiner's bald conclusion that a method embodying these features would have been obvious.

Accordingly, we shall not sustain the standing 35 U.S.C. § 103 rejection of claims 4, 8 and 11, or of claims 5, 6, 9 and 12 which depend therefrom, as being unpatentable over the admitted prior art in view of Hamada.

As for the second rejection, the Japanese reference discloses a working vehicle designed to ease the task of an automobile assembly line worker. The vehicle 1 includes a space 1a for a worker, a shelf 2 for tools, a shelf 3 for component parts, wheels 5, 6 for moving on rails 7 on a

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factory floor 6 alongside an automobile assembly conveyor, and a connector 10 for detachable coupling to the conveyor.

As acknowledged by the examiner (see page 7 in the main answer), the Japanese reference fails to respond to any of the limitations in independent claims 4, 8 and 11 relating to the robot or to the work/vehicle body section mounting and aligning means. In short, there is nothing in Monforte's robotic end effector tool disclosure and/or Hamada's assembly system disclosure which would have suggested modifying the method implicitly disclosed by the Japanese reference to arrive at the subject matter recited in these claims. Here again, the only suggestion for combining the references in the manner proposed stems from hindsight knowledge improperly derived from the appellants' disclosure.

Hence, we shall not sustain the standing 35 U.S.C. § 103 rejection of claims 4, 8 and 11, or of claims 5, 6, 9 and 12 which depend therefrom, as being unpatentable over the Japanese reference in view of Monforte and Hamada.

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In summary, the decision of the examiner to reject claims  
4 through 6, 8, 9, 11 and 12 is reversed.

REVERSED

JOHN P. McQUADE	)	
Administrative Patent Judge	)	
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JEFFREY V. NASE	)	BOARD OF PATENT
Administrative Patent Judge	)	APPEALS AND
	)	INTERFERENCES
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JOHN F. GONZALES	)	
Administrative Patent Judge	)	

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