

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 30

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte MAKOTO HIJIKATA

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Appeal No. 2001-0027  
Application 09/110,397

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HEARD: FEBRUARY 7, 2002

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Before JERRY SMITH, DIXON and SAADAT, Administrative Patent Judges.

SAADAT, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the Examiner's final rejection of claims 5, 7 through 9, 11, 12, 14, 16 and 17. Claims 1 through 4 have been canceled while claims 6, 10, 13, 15 and 18 have been allowed by the Examiner.

We reverse.

BACKGROUND

Appellant's invention is directed to an on-vehicle navigation system that considers the user's run experience

data indicating that the vehicle has previously driven on the road, and selects a preferred guiding route. The run experience data is obtained and stored for every road unit on which the vehicle runs as the previously stored weight corresponding with that road unit is adjusted (specification, pages 3 & 4). A traveling route that has the minimum sum value of road unit weights is selected among the plurality of available traveling routes between the start point and the destination (specification, page 5).

Representative independent claim 5 is reproduced as follows:

5. A navigation apparatus for guiding a travel route of a mobile vehicle, comprising:

storage means for storing data of road units;

position detection means for detecting a present position of said mobile vehicle;

road unit determining means for determining a road unit on which said mobile vehicle is running based on said present position of said mobile vehicle detected by said position detection means;

running road storing means operable to store running experience data for said road unit determined by said road unit determining means as said mobile vehicle travels on said road unit determined by said road unit determining means; and

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a route searching means for searching for a preferred travel route by using said present position of said mobile vehicle detected by said position detecting means, said data of road units stored in said storage means, and said running experience data previously stored in said running road storing means.

The prior art references of record relied upon by the Examiner in rejecting the appealed claims are:

Ikeda et al. (Ikeda) 1991	5,031,104	Jul. 9,
Zechnull 1992	5,146,219	Sep. 8,
Braegas 1995	5,406,490	Apr. 11,
Maki 17, 1996	5,557,524	Sep.
		(filed Sep. 30, 1993)
Hirota et al. (Hirota) 1995)	5,568,390	Oct. 22, 1996 (filed Dec. 29,

Claims 5 and 14 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Braegas in view of Zechnull and Maki. Claims 7 through 9, 12 and 17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Braegas in view of Zechnull, Maki and Ikeda. Claims 11 and 16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Braegas in view of Zechnull, Maki and Hirota.

Rather than reiterate the conflicting viewpoints advanced

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by the Examiner and Appellant regarding the above-noted rejections, we make reference to the answer (Paper No. 22, mailed February 23, 2000) for the Examiner's complete reasoning in support of the rejections, and to the brief (Paper No. 21, filed January 28, 2000) and the reply brief (Paper No. 24, filed April 24, 2000) for Appellant's arguments thereagainst.

#### OPINION

In reaching our decision in this appeal, we have given careful consideration to Appellant's specification and claims, to the applied prior art references, and to the respective positions articulated by Appellant and the Examiner. After careful review of the evidence before us, it is our conclusion that the evidence provided by the Examiner is insufficient to establish a prima facie case of obviousness. Accordingly, we will not sustain the Examiner's rejection of claims 5, 7 through 9, 11, 12, 14, 16 and 17 under 35 U.S.C. § 103.

With respect to claims 5 and 14, Appellant argues that

the traffic report memory 4 of Braegas does not keep track of the vehicle's run experience data, rather, it merely stores general broadcast traffic advisories from the radio traffic service decoder 3. In particular, Appellant asserts that neither this information nor the "route" stored in memory area 6a relates to the claimed "running experience data" obtained as the vehicle travels on a road unit (brief, page 6 and reply brief, page 2). Furthermore, Appellant argues that modifying Braegas with Zechnall and Maki to coordinate traffic data with vehicle's present position on the road unit contradicts the purpose of traffic advisories that would not be useful if obtained as the vehicle travels through the traffic jam (brief, page 7 and reply brief, page 3). Appellant also indicates that neither Zechnall nor Maki teaches storing running experience data as the vehicle travels on the road unit and using the data in route selection as both references consider road information and pre-prepared maps from stored memory (brief, page 8 and reply brief, page 4).

In response to Appellant's arguments, the Examiner equates the claimed "run experience data" to traffic data of Braegas and states that such data is specific to the present

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location of the vehicle since route changes are provided shortly before another route is to be abandoned (answer, page 6). Furthermore, the Examiner indicates that Zechnall obtains "run experience data" using a test vehicle that records the data while running on roads. With regard to Maki, the Examiner states that travel route data is recorded manually in a record book based on the odometer input as a vehicle travels on a road (answer, page 7).

In rejecting claims under 35 U.S.C. § 103, the Examiner bears the initial burden of presenting a prima facie case of obviousness. See In re Rijckaert, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993). The conclusion that the claimed subject matter is obvious must be supported by evidence, as shown by some objective teaching in the prior art or by knowledge generally available to one of ordinary skill in the art that would have led that individual to combine the relevant teachings of the references to arrive at the claimed invention. See In re Fine, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Furthermore, to reach a conclusion of obviousness under § 103, the examiner must also

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produce factual basis supported by teaching in a prior art reference or shown to be common knowledge of unquestionable demonstration, consistent with the holding in Graham v. John Deere Co., 383 U.S. 1 (1966). Our reviewing court requires this evidence in order to establish a prima facie case. In re Piasecki, 745 F.2d 1468, 1471-72, 223 USPQ 785, 787-88 (Fed. Cir. 1984); In re Cofer, 354 F.2d 664, 668, 148 USPQ 268, 271-72 (CCPA 1966).

After a review of Braegas, we find that the reference relates to a vehicle navigation system that takes broadcast traffic advisories into consideration when searching for a route (col. 1, lines 60-66). Braegas further discloses receipt of such advisories in decoder 3 that evaluates traffic reports and stores traffic advisories in traffic report memory 4 (the drawing figure and col. 2, lines 58-62). The advisories that are relevant to the planned route are then checked against the stored information related to the type of road and the traffic obstruction to determine the route that takes the vehicle to its destination as quickly as possible (col. 3, lines 56-67). Thus, to propose a preferred route, Braegas takes into account only pre-stored road-type

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information and traffic advisories related to the upcoming road sections.

Zechnall, on the other hand, is related to a navigation system that provides to the driver safety-related road information, such as location of schools and highway danger signs (col. 1, lines 11-13 & 28-34). Furthermore, Zechnall uses previously stored road network data, which had been empirically determined by test vehicles, in combination with corresponding safety-related data to provide directional and driving instructions to the driver (col. 3, lines 13-44). Therefore, no new information in the form of "running experience data" is stored as the vehicle travels on each road section. Instead, both mapping and safety-related data of Zechnall are initially determined and stored before the navigation system becomes available to the driver.

Additionally, a review of Maki shows that the reference relates to providing travel route map components such as travel route terrain and velocity plots (col. 2, lines 46-53). Other provided travel information may relate to the usage of the vehicle on the recommended routes such as mileage and business travel tax deduction or the en route geological

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information (col. 2, lines 60-67). Contrary to the Examiner's assertion related to manually recording travel route data, we find that Maki indeed uses route map data stored in a storage media to automate real time displaying of travel route map and recording of vehicle use information (col. 2, lines 29-43).

Based on the findings above, we cannot agree with the Examiner that the traffic advisories of Braegas in combination with the travel route data display of Zechnall and Maki would result in the claimed navigation apparatus that uses stored running experience data. In that regard, while Braegas selects a route based on the road type and the obstruction determined by stored traffic advisories, no "running experience data" is stored and used in searching for the preferred route as the vehicle travels on the road. Consistent with Appellant's arguments, neither sources of data in Braegas (traffic reports and road types) are stored for any specific road unit as the vehicle travels on that road unit. Additionally, Braegas does not search for the preferred route using the previously stored "running experience data." Rather, the selection is made based on fixed pre-stored road

type information and the traffic data related to distant sections of the proposed routes other than the one actually being traveled by the vehicle. Furthermore, we find that Zechnall and Maki, at the best, store road information in a storage device to be later retrieved and used in a vehicle navigation system. Therefore, Zechnall and Maki neither overcome the deficiencies discussed above with respect to Braegas nor provide any teachings or suggestions to realistically modify Braegas and store "running experience data" each time the vehicle travels on the road unit which is used in searching for the preferred route.

Thus, we find no teachings related to storing "running experience data" as the vehicle travels on the road unit or any reason for combining various teachings in these references to arrive at the claimed invention. Accordingly, we do not sustain the rejection of claims 5 and 14 under 35 U.S.C. § 103 over Braegas in view of Zechnall and Maki.

With respect to the rejection of claims 7 through 9, 12 and 17 over Braegas in view of Zechnall, Maki and Ikeda and the rejection of claims 11 and 16 over Braegas in view of Zechnall, Maki and Hirota, Appellant argues that Ikeda and

Hirota do not make up for the deficiencies of the combination of Braegas, Zechall and Maki (brief, pages 9 & 10).

Furthermore, Appellant reasons that Ikeda and Hirota do not teach storing "running experience data" as the vehicle travels on the road unit and using such data in searching for a preferred route.

Initially, we note that independent claims 11 and 12, similar to claim 5, include the limitations related to storing "running experience data" as the vehicle travels on the road unit and using such data in searching for a preferred route. After reviewing the references, we find that while Ikeda teaches stored route conditions and Hirota discloses fuel consumption based on speed as the basis for selection of a preferred route, neither references teach collecting and storing "running experience data" as the vehicle travels on each road unit. Moreover, each reference provides route selection merely based on some sort of fixed pre-stored information other than the vehicle's "running experience data." Therefore, Ikeda and Hirota neither overcome the deficiencies discussed above in Braegas and other references nor suggest any reason to one of ordinary skill in the art to

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reasonably modify the combination of Braegas, Zechnall and Maki. Accordingly, the rejection of claims 7 through 9, 11, 12, 16 and 17 under 35 U.S.C. § 103 cannot be sustained.

CONCLUSION

In view of the foregoing, the decision of the Examiner to reject claims 5, 7 through 9, 11, 12, 14, 16 and 17 under 35 U.S.C. § 103 is reversed.

REVERSED

JERRY SMITH )  
Administrative Patent Judge )  
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JOSEPH L. DIXON ) BOARD OF PATENT  
Administrative Patent Judge ) APPEALS AND  
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