

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

HYUNDAI MOTOR COMPANY,

Petitioner,

v.

MEL NAVIP LLC,

Patent Owner

Case No. IPR2024-00174

U.S. Patent No. 8,812,230

PATENT OWNER'S PRELIMINARY RESPONSE

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Exhibit List

Exhibit	Description
2001	Declaration of Dr. Fang Qiu (“Qiu Decl.”)
2002	Curriculum vitae of Dr. Fang Qiu

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USE OF EMPHASIS IN QUOTATIONS

All emphases in quotations and exhibit citations have been added, unless otherwise indicated.

APPLICABLE STATUTES

References to 35 U.S.C. §§ 102 and 103 are to the pre AIA versions applicable to the U.S. Patent No. 8,812,230.

I. INTRODUCTION

Mel NavIP LLC (“Patent Owner” or “Mel NavIP”) submits this preliminary response showing that each of the 2 grounds set forth by Hyundai Motor Company (“Petitioner” or “Hyundai”) fail to render obvious challenged claims 1-2 and 4-8 of U.S. Patent No. 8,812,230 (“the ’230 Patent”).

As to Ground 1, a number of elements of independent claim 1 and its dependents are not disclosed by Fujiwara, and the missing elements would not be obvious to a POSITA.

As to Ground 2, the combination of Ota and Matsuo does not disclose every element of claims 1-2 and 4-8 and the missing elements would not be obvious to a POSITA.

Accordingly, Patent Owner respectfully requests that the Board deny the petition for *inter partes* review of claims 1-3 and 4-8 of the ’230 Patent on the merits.

II. THE ’230 PATENT DISCLOSES AN IMPROVED NAVIGATION DEVICE THAT PROVIDES FOR CUSTOMIZED NOTIFICATIONS BASED ON UPDATES.

The ’230 Patent was filed on June 10, 2009, and issued on August 19, 2014. The ’230 Patent is directed to a navigation device capable of providing customized notifications based on updated information from a destination facility. EX1001, ’230 Patent, Abstract. Generally, the field pertains to navigation devices and providing information about destinations to the users of navigation devices. *Id.* at 1:11-19. Prior art navigation systems involved complex manual entry to narrow the

information provided to display and provided no way of weeding out outdated, unnecessary information from being presented to the user. *Id.* at 1:58-2:3.

The inventions of the '230 Patent solve these problems by performing predetermined processes on the information distributed from the destination facility and displaying whether there is an update in the service information at a facility according to a set notification condition. *Id.* at 2:28-37. Accordingly, the navigation device can easily display up to date, customized information distributed by a destination facility. *Id.*

III. EXPERT TESTIMONY, LEVEL OF SKILL IN THE ART, AND CLAIM CONSTRUCTION

A. Declaration Evidence

This Preliminary Response is supported by the declaration of Dr. Fang Qiu, an expert with long-standing experience in the industry. Ex. 2001. Dr. Qiu is Department Head and Professor of GIS and Remote Sensing at the University of Texas at Dallas. He teaches classes in Geographic Information Sciences. He received a Bachelor of Science degree in Geography from East China Normal University in Shanghai, China, in 1990. He received a Master of Science degree in Geographic Information Systems from the Chinese Academy of Sciences in Beijing, China, in 1993. He received a Ph.D. in Geography with a concentration in geographic information processing from the University of South Carolina in Columbia, South Carolina, in 2000. EX2001 at 7-11.

B. Person of Ordinary Skill in the Art

On or before June 10, 2009, a POSITA relating to the technology of the '230 Patent would have (a) a Bachelor's of Science degree in a technical field and at least four years of experience in the field of design and/or manufacture of navigation systems; (b) a Master's of Science degree in a technical field and at least two years of experience in the field of design and/or manufacture of navigation systems; or (c) a PhD in a technical field relating to the design and/or manufacture of navigation systems. Additional graduate education could substitute for professional experience, or significant experience in the field could substitute for formal education. Ex. 2001, ¶ 29.

IV. PRIOR ART CITED BY PETITIONER.**A. Fujiwara**

Petitioner's reference for Ground 1 is U.S. Patent Application Publication No. 2004/0012506 to Fujiwara. Ex. 1005 ("Fujiwara"). Fujiwara has a filing date of July 7, 2003. Fujiwara is directed to a display system for a specified location on a map. EX1005 at ¶ 1. Fujiwara notes that navigation devices of its time relied on CD-ROM's for map and facility information. *Id.* at ¶ 4. Fujiwara also noted that cellular telephone systems, as used at the time, made transmission of large quantities of data inadvisable. *Id.* at ¶ 6. To address these issues, Fujiwara discloses a system whereby information is sent to an information offering device and can be then retrieved by

information display equipment that based on input from the user such as key words. *Id.* at ¶¶ 7-11. The information can then be displayed when a user clicks on an icon on a map. *Id.*

B. Ota

Ota is the primary reference for Ground 2. Ota is a Japanese Unexamined Patent Application Publication with a publication date of March 6, 2008. EX1008. The invention disclosed in Ota aims to address the shortcomings of storage devices on navigation devices having outdated facility information. EX1008 at p. 8, ¶ 5-6. Ota notes the inconvenience and inefficiency of requiring the purchase of new storage media to keep the facility information updated. *Id.* at p. 9, ¶ 11. To address these issues, the invention of Ota contemplates using a “facility information storage unit” and a “facility information reading means” that identifies information sent via radio waves as new based on date and time. *Id.* at p. 11, ¶¶ 19-20.

C. Matsuo

Matsuo is a secondary reference for Petitioner's Ground 2. It is a U.S. Patent with a publication date of February 16, 2006. It is entitled “Navigation Device for Receiving Delivered Information.” EX1010. Matsuo is aimed at addressing issues with excessive data transmission when providing route guidance to a destination. EX1010 at 1:54-2:29. Its proposed solution involves the navigation device having a secondary map storage so that all of the required map data does not need to be

transmitted to the navigation device via broadcasting. *Id.* at 2:58-3:10. Further, Matsuo contemplates reducing data transmission via broadcasting by asking the user if rerouting is required when the user veers off course. *Id.* at 2:2-27. The invention also contemplates reducing data transmission by using GPS correction data that is stored locally. *Id.* at 2:37-46. Matsuo is also aimed at transmitting coupons to users via navigation devices and permitting the user to use the coupon without printing the coupon. *Id.* at 2:55-67.

V. GROUND 1 – FUJIWARA IN COMBINATION WITH THE KNOWLEDGE OF A POSITA DOES NOT RENDER CHALLENGED CLAIMS 1, 2 AND 4-8 OBVIOUS

Petitioner relies on Fujiwara as its primary reference for Ground 1. But Petitioner fails to demonstrate that Fujiwara in view of the knowledge of a POSITA would render obvious Claims 1-2 and 4-8. Ex. 2001, ¶¶ 40-47.

Independent Claim 1 recites:

A navigation device comprising:

a data storage unit for storing data;

a service information reception processing unit for receiving service information at an external registration destination facility with which member registration is made, the service information being distributed from the external registration destination facility;

a service information analyzing processing unit for performing a predetermined process on the service information received by said service information reception processing unit to register the service information in said data storage unit;

a notification condition customization setting unit for setting a notification condition about notification of the service information at the external registration destination facility; and

a facility icon display processing unit for displaying, on a map of a current location and surrounding area of the navigation device, an icon representing a registration destination facility located within an area covered by the displayed map, and for displaying a modified version of the icon on the map in such manner indicating that there is an update in service information at the registration destination facility located within an area covered by the displayed map, according to the notification condition set by said notification condition customization setting unit, said notification condition being satisfied when the service information at the represented registration destination facility has been updated,

wherein the navigation device displays the map on which the icon is displayed in accordance with a navigation function.

EX1001 at Claim 1. Even in light of the knowledge of a POSITA, Fujiwara does not teach or render obvious “a service information reception processing unit for receiving service information at an external registration destination facility with which member registration is made” as required by Claim 1. Additionally, even in light of the knowledge of a POSITA, Fujiwara does not teach or render obvious “a notification condition customization setting unit for setting a notification condition about notification of the service information at the external registration destination facility” as required by Claim 1. Further, even in light of the knowledge of a POSITA, Fujiwara does not teach or render obvious:

displaying a modified version of the icon on the map in such manner indicating that there is an update in service information at the registration destination facility located within an area covered by the displayed map, according to the notification condition set by said notification condition customization setting unit, said notification

condition being satisfied when the service information at the represented registration destination facility has been updated.

A. Fujiwara Fails to Disclose or Render Obvious “a service information reception processing unit for receiving service information at an external registration destination facility with which member registration is made”

Petitioner argues Fujiwara discloses this element by way of the “information offering server”—which it erroneously equates with the external registration facility. Petition at 17. However, Fujiwara does not provide any indication whatsoever that the information offering server pertains to a particular facility. EX2001 at ¶¶ 41-43. In fact, the ‘230 Patent itself describes route guidance to a registration destination facility—which supports the argument that the information offering server simply cannot be the same as the registration destination facility. *See* EX1001 at 1:20-30. Furthermore, Fujiwara only provides for registration with an information offering server for categorical information, such as hotels, restaurants or parking lots. EX2001 at ¶¶ 41-43. There is simply no disclosure in Fujiwara pertaining to a particular registration destination facility with which member registration is made. *Id.* Furthermore, a POSITA would not understand Fujiwara as rendering this element obvious because the system of Fujiwara differs from that of the ‘230 Patent fundamentally. *Id.*

B. Fujiwara Fails to Disclose “a notification condition customization setting unit for setting a notification condition about notification of the service information at the external registration destination facility”

Petitioner argues that Fujiwara's disclosure that a driver can select information such as “hotel,” “restaurant,” and “parking lot” and Fujiwara's retrieval range setting disclose this claim limitation. Petition at 17-18. However, the '230 Patent makes clear that service information must be subject to updating. EX1001 at 2:28-37. The categorical information for which the disclosure of Fujiwara pertains is not service information as described in the '230 Patent. EX2001 at ¶ 44. Furthermore, a POSITA would not find it obvious to replace the high level, categorical information disclosed in Fujiwara with the destination specific service information disclosed in the '230 Patent. *Id.*

C. Fujiwara Does Not Disclose or Render Obvious “displaying a modified version of the icon on the map in such manner indicating that there is an update in service information at the registration destination facility located within an area covered by the displayed map, according to the notification condition set by said notification condition customization setting unit, said notification condition being satisfied when the service information at the represented registration destination facility has been updated”

First, Petitioner contends that this element is disclosed because Fujiwara describes information from the information offering device changing with time and updating with high frequency. Petition at 28. However, there is nothing in the disclosure of Fujiwara that indicates that the updated service information is subject

to a notification condition set by a user for a destination facility where the user has registered. EX2001 at ¶¶ 45-47. Rather, once again, the information is at best categorical information not specific to a facility where the user has registered. *Id.* Furthermore, Fujiwara's vague description of intelligibly presenting information for a driver's convenience is a far cry from displaying a modified version of an icon on a map to indicate that there is an update in service information as required by the claim. *Id.* As the '230 Patent and Claim 1 make clear, the service information at the registration destination facility at which a user has registered must be updated for a notification condition to be met. *Id.* Accordingly, an indication of an update at a server of high-level, categorical information cannot be a disclosure of this element. *Id.* A POSITA would also not consider the disclosure of updates to whole categories of service providers as rendering obvious updates based on notification conditions set by a user for specific destinations at which the user has registered. *Id.*

D. Fujiwara Does Not Disclose or Render Obvious Dependent Claims 2 and 4-8

Just as Fujiwara in view of the knowledge of a POSITA does not render independent Claim 1 obvious, Petitioner cannot demonstrate that any of the dependent claims challenged in Ground 1 are rendered obvious.

VI. GROUND 2—OTA IN COMBINATION WITH MATSUO IN VIEW OF THE KNOWLEDGE OF A POSITA FAILS TO RENDER OBVIOUS CLAIMS 1-2 AND 4-8.

Petitioner relies on Ota as its primary reference for Gound 2, and it relies on Matsuo as its secondary reference for the Ground. But Petitioner fails to demonstrate that Ota in view of Matsuo further in view of the knowledge of a POSITA would render obvious Claims 1-2 and 4-8. EX2001 at ¶¶ 48-57.

As discussed above and repeated here, independent Claim 1 recites:

A navigation device comprising:

a data storage unit for storing data;

a service information reception processing unit for receiving service information at an external registration destination facility with which member registration is made, the service information being distributed from the external registration destination facility;

a service information analyzing processing unit for performing a predetermined process on the service information received by said service information reception processing unit to register the service information in said data storage unit;

a notification condition customization setting unit for setting a notification condition about notification of the service information at the external registration destination facility; and

a facility icon display processing unit for displaying, on a map of a current location and surrounding area of the navigation device, an icon representing a registration destination facility located within an area covered by the displayed map, and for displaying a modified version of the icon on the map in such manner indicating that there is an update in service information at the registration destination facility located within an area covered by the displayed map, according to the notification condition set by said notification condition customization setting unit,

said notification condition being satisfied when the service information at the represented registration destination facility has been updated,

wherein the navigation device displays the map on which the icon is displayed in accordance with a navigation function.

EX1001 at Claim 1. Even in light of the knowledge of a POSITA, Ota in view of Matsuo does not teach or render obvious “a service information reception processing unit for receiving service information at an external registration destination facility with which member registration is made” as required by Claim 1. Additionally, even in light of the knowledge of a POSITA, Ota in view of Matsuo does not teach or render obvious “a notification condition customization setting unit for setting a notification condition about notification of the service information at the external registration destination facility” as required by Claim 1. Further, even in light of the knowledge of a POSITA, Ota in view of Matsuo does not teach or render obvious:

displaying a modified version of the icon on the map in such manner indicating that there is an update in service information at the registration destination facility located within an area covered by the displayed map, according to the notification condition set by said notification condition customization setting unit, said notification condition being satisfied when the service information at the represented registration destination facility has been updated.

Furthermore, a POSITA would not be motivated to combine the teachings of Matsuo with Ota.

A. Ota in View of Matsuo Fails to Disclose or Render Obvious “a service information reception processing unit for receiving service information at an external registration destination facility with which member registration is made”

Petitioner erroneously argues that the “broadcast database” of Ota and the “map delivery center” of Matsuo equate to an external registration destination facility as claimed in Claim 1. Petition at 53-54. However, Ota does not provide any indication whatsoever that the broadcast database pertains to a particular facility. EX2001 at ¶¶ 49-51. The same is true for Matsuo with respect to its map delivery center. *Id.* In fact, the ‘230 Patent itself describes route guidance to a registration destination facility—which supports the argument that the broadcast database simply cannot be the same as the registration destination facility. *See*, EX1001 at 1:20-30.

Furthermore, Petitioner relies on Matsuo’s disclosure of an “authentication unit.” Petition at 55. There is simply no disclosure in Matsuo pertaining to a particular registration destination facility with which member registration is made. EX2001 at ¶¶ 49-51. Matsuo simply discloses authentication as a prerequisite to receiving information from a server—it does not disclose registration for receiving service information at a particular registration destination facility. Furthermore, a POSITA would not understand Ota in Matsuo as rendering this element obvious because the disclosure of Ota in view of Matsuo differs from that of the ‘230 Patent fundamentally. *Id.*

B. Ota in View of Matsuo Fails to Disclose “a notification condition customization setting unit for setting a notification condition about notification of the service information at the external registration destination facility”

Petitioner argues that Ota's disclosure that a driver can select information such as “restaurant or amusement facility” and Ota's “date and time” settings disclose this claim limitation. Petition at 61. However, the '230 Patent makes clear that service information must be subject to updating. EX1001 at 2:28-37. The categorical information for which the disclosure of Ota pertains is not service information as described in the '230 Patent. EX2001 at ¶¶ 52-53. Furthermore, a POSITA would not find it obvious to replace the high level, categorical information disclosed in Ota with the destination specific service information disclosed in the '230 Patent. *Id.*

C. Ota in View of Matsuo Does Not Disclose or Render Obvious “displaying a modified version of the icon on the map in such manner indicating that there is an update in service information at the registration destination facility located within an area covered by the displayed map, according to the notification condition set by said notification condition customization setting unit, said notification condition being satisfied when the service information at the represented registration destination facility has been updated”

First, Petitioner contends that the map of Ota discloses icons pertaining to registration destination facilities. Petition at 62. However, there is no disclosure in Ota of registration at a destination facility. EX2001 at ¶¶ 54-55. Again, there is nothing in the disclosure of Ota that indicates that the updated service information is subject to a notification condition set by a user for a destination facility where the

user has registered. *Id.* Rather, once again, the information is at best categorical information not specific to a facility where the user has registered. *Id.* Furthermore, Ota's description of identifying icons as "recommended" or "new" is far cry from displaying a modified version of an icon on a map to indicate that there is an update in service information as required by the claim. *Id.* As the '230 Patent and Claim 1 make clear, the service information at the registration destination facility at which a user has registered must be updated for a notification condition to be met. *Id.* Accordingly, an indication of an update at a server of high-level, categorical information cannot be a disclosure of this element. *Id.* A POSITA would also not consider the disclosure of updates to whole categories of service providers as rendering obvious updates based on notification conditions set by a user for specific destinations at which the user has registered. *Id.*

D. Fujiwara Does Not Disclose or Render Obvious Dependent Claims 2 and 4-8

Just as Ota in view of Matsuo further in view of the knowledge of a POSITA does not render independent Claim 1 obvious, Petitioner cannot demonstrate that any of the dependent claims challenged in Ground 2 are rendered obvious.

E. A POSITA Would Not be Motivated to Combine Ota With Matsuo

A POSITA viewing the navigation system of Ota would not review or consider the Matsuo reference at all as the combination would not include each

element of Claim 1 as discussed above. In other words, the combination of Ota and Matsuo would not have resulted in the inventions of the '230 Patent and would not have performed the same function. EX2001 at ¶¶ 56-57. As addressed extensively above, the combination would not have led to a device which provides modification to an icon on a map based on an update to service information at a destination facility with which a user has registered. *Id.* Moreover, the combination would not have led to a device wherein the update is based on a notification condition set by the user. *Id.*

VII. CONCLUSION

The Board should exercise its discretion to deny the petition on each of Grounds 1 and 2. Accordingly, Patent Owner respectfully requests the Board deny institution of this petition with respect to both Grounds 1 and 2.

Respectfully submitted,

/Neal Massand/
Neal Massand
Counsel for Patent Owner

CERTIFICATE OF COMPLIANCE

Per 37 C.F.R. §42.24(a) and (d), the undersigned hereby certifies that the Petition complies with the type-volume limitation of 37 C.F.R. §42.24(a)(i) because, exclusive of exempted portions, it contains 3584 words as counted by the word-processing program used to prepare it.

Dated: February 28, 2024

Respectfully submitted,

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CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. § 42.6(e), the undersigned certifies that the above-captioned Mandatory Notice was served on counsel of record for the Petitioner by filing this document through the Patent Review Processing System as well as by delivering a copy via electronic mail to:

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Dated: February 28, 2024

/s/ Neal Massand
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