

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GENERAL MOTORS LLC,
Petitioner,

v.

EDWARD H. NORTRUP,
Patent Owner.

Case IPR2023-00994
Patent No. 10,444,028 B2

PETITIONER'S REPLY TO PATENT OWNER'S RESPONSE

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	THE RESPONSE MISCHARACTERIZES THE PROPOSED COMBINATION OF KNOCKEART WITH FELDMAN	2
A.	The Proposed Combination of Knockeart with Feldman in the Petition Provides Two, Alternative Configurations.....	2
1.	The Petition’s First Configuration for the Knockeart-Feldman Combination	2
2.	The Petition’s Second Configuration for the Knockeart-Feldman Combination	6
B.	The Primary Configuration of the Proposed Combination of Knockeart with Feldman Provides All Elements of Claim 1	7
C.	The Secondary Configuration of the Proposed Combination of Knockeart with Feldman Also Provides All Elements of Claim 1	10
1.	Feldman discloses multiple techniques for collecting traffic information, including self-reporting from GPS enabled cellphones .	11
2.	Even if Feldman were limited to cellphone tower handover-based location tracking, Knockeart’s disclosures regarding selectively enabling and disabling location tracking still would have been applicable to the cellphones of the resulting combination.....	16
III.	SIMSKE IS A PRIOR ART PRINTED PUBLICATION FOR THE PURPOSES OF THIS IPR PROCEEDING	18
IV.	THE POR DOES NOT SEPARATELY ADDRESS THE DEPENDENT CLAIMS	20
V.	CONCLUSION	21

EXHIBIT LIST

GM-1001	U.S. Patent No. 10,444,028 to Edward H. Nortrup (“the ’028 patent”)
GM-1002	Excerpts from the Prosecution History of the ’028 patent (“the Prosecution History”)
GM-1003	Expert Declaration of Dr. Michael Braasch
GM-1004	U.S. Patent Pub. No. 2003/0055542 to Knockeart et al. (“Knockeart”)
GM-1005	U.S. Patent Pub. No. 2002/0026278 to Feldman et al. (“Feldman”)
GM-1006	U.S. Patent Pub. No. 2005/0096840 to Simske (“Simske”)
GM-1007	U.S. Patent No. 7,203,598 to Whitsell (“Whitsell”)
GM-1008	U.S. Patent No. 6,615,133 to Boies et al. (“Boies”)
GM-1009	U.S. Patent No. 5,845,227 to Peterson (“Peterson”)
GM-1010	U.S. Patent No. 7,027,915 to Craine (“Craine”)
GM-1011	<i>Bearing Straight</i> Forbes (May 4, 1998) (Located at https://www.forbes.com/forbes-life-magazine/1998/0504/096.html?sh=7d25a7166b54)
GM-1012	J. Hightower and G. Borriello, "Location systems for ubiquitous computing," in <i>Computer</i> , vol. 34, no. 8, pp. 57-66, Aug. 2001, doi: 10.1109/2.940014
GM-1013	U.S. Patent Pub. No. 2003/0009277 to Fan et al. (“Fan”) (cited during prosecution of the ’028 patent)

GM-1014	U.S. Patent No. 6,377,810 to Geiger et al. (“Geiger”)
GM-1015	U.S. Patent No. 6,456,854 to Chern et al. (“Chern”)
GM-1016	U.S. Patent Pub. No. 2004/0192299 to Wilson et al. (“Wilson”)
GM-1017	U.S. Patent Pub. No. 2004/0224702 to Chaskar (“Chaskar”)
GM-1018	Second Expert Declaration of Dr. Michael Braasch

I. INTRODUCTION

Patent Owner's Response—which is devoid of expert support and based solely on attorney argument—mischaracterizes both the arguments presented in the Petition and the disclosures of the cited references. The POR's main argument rests on a fundamental misunderstanding of the proposed combination of Knokeart with Feldman, as articulated in the Petition, and ignores the teachings of Feldman as a whole. Specifically, the POR completely ignores the obviousness combination the Petition actually proposes: modification of Knokeart based on the teachings of Feldman to implement Knokeart's in-vehicle systems as cellphones. The POR presents no arguments addressing this primary proposed configuration for combining Knokeart and Feldman, and the Board could properly find the challenged claims obvious under that configuration alone.

In addition to its erroneous substantive arguments, the POR also presents a procedural argument regarding the prior art status of Simske. POR, 17-18. This argument relies on a strained and incorrect interpretation of the statutory scheme, which no Court has adopted. Indeed, there is ample authority from the Supreme Court, the Federal Circuit, and the Board to support the use of pre-AIA § 102(e) in determining a patent application's priority date. The Board should reject Patent Owner's unsupported challenge to this consistent practice of treating the filing date of a published patent application as the effective prior art date.

As demonstrated below, the POR's arguments are incorrect; Knockeart in view of Feldman (either alone or in combination with the additional references described in Grounds 2-7 of the Petition) discloses all elements of the challenged claims, thereby rendering them obvious.

II. THE RESPONSE MISCHARACTERIZES THE PROPOSED COMBINATION OF KNOCKEART WITH FELDMAN

The POR provides an inaccurate framing of the proposed combination of Knockeart with Feldman, misrepresents the full scope of the teachings of the cited references, and attacks strawman positions that are not based on the actual reasoning and analysis advanced in the Petition. GM-1018, ¶2. As demonstrated by the Petition and supported by the arguments below, the proposed prior art combinations provide all elements of the challenged claims.

A. The Proposed Combination of Knockeart with Feldman in the Petition Provides Two, Alternative Configurations

The Petition identifies two, alternative configurations for applying Feldman's suggestions to Knockeart's navigation system. Prior to addressing the errors in the POR, Petitioner presents a brief overview of the two alternative configurations for the Knockeart-Feldman combination presented in the Petition to reorient the Board to a correct framing of the relevant issues.

1. The Petition's First Configuration for the Knockeart-Feldman Combination

The Petition describes the primary proposed configuration as "apply[ing] the

teachings of Feldman to Knockart to implement all or a portion of Knockart's in-vehicle systems as cellular phones for the purpose of collecting probe vehicle traffic data." Pet., 9. In other words, the Petition's primary configuration proposes retaining all functionality of Knockart's navigation system and adding cellular phone capability to Knockart's system, or otherwise implementing Knockart's in-vehicle devices as cellphones, based on Feldman's suggestion. GM-1003, ¶66 ("a POSITA would have predictably applied the teachings of Feldman to Knockart to implement all or a portion of Knockart's in-vehicle systems as cellular phones for the purpose of collecting probe vehicle traffic data."), ¶76, ¶85 ("Knockart describes that the user can interact with the in-vehicle user device (implemented as a cellular phone in the predictable combination)."), ¶89 ("in the predictable combination of Knockart with Feldman, at least some of the in-vehicle probes used to collect traffic information would have been implemented as cellular phones."), ¶91, ¶95, ¶99, ¶107, ¶124, ¶175; GM-1018, ¶¶5-6. As Dr. Braasch previously testified, "it was well-known in the art prior to 2004 to utilize cellphones as probes to collect traffic data for road segments." GM-1003, ¶67 (citing GM-1006, [0012]-[0013]; GM-1007, 1:42-54, 2:56-3:2; GM-1010, 7:51-54).

This primary configuration for the Knockart-Feldman combination is repeated throughout the Petition. Pet., 14 ("Thus, it would have been obvious to

implement Knockeart's in-vehicle system using cellphones (as suggested by Feldman))), 14 ("modify Knockeart's navigation system to utilize vehicle-carried cellphones to populate at least some of the traffic data"), 26 ("Knockeart discloses that the in-vehicle system (implemented in whole or in part as a cell phone in the Knockeart-Feldman system)...").

Dr. Braasch confirms this primary configuration for applying Feldman's suggestions to Knockeart in his initial declaration, stating that "a POSITA would have predictably applied the teachings of Feldman to Knockeart to implement all or a portion of Knockeart's in-vehicle systems as cellular phones for the purpose of collecting probe vehicle traffic data" such that "[i]n some implementations, ***all of the in-vehicle systems described by Knockeart would have been implemented as vehicle mounted or user carried cellular phones.***" GM-1003, ¶66, *see also* ¶59 (describing implementing "Knockeart's navigation system to include the common prior art practice of using cellular telephones traveling in vehicles to determine traffic information for various road segments."); GM-1018, ¶¶5-8.

One reason that a skilled artisan would have been motivated to apply Feldman's suggestions to Knockeart is because "Knockeart expressly discloses that the in-vehicle system communicates wirelessly with the server 'over a standard analog cellular telephone system' or 'digital cellular telephone links'" and therefore it would have been beneficial to implement Knockeart's system to

include full cellular phone capabilities “because cell phones were already configured to utilize such cellular telephone systems.” Pet., 14 (citing GM-1003, ¶65; GM-1004, [0074], [0078], [0086]). Indeed, Knockeart describes that its unmodified system already includes voice input and output functionality, a cellular transceiver, and a handset. GM-1004, [0120]-[0121].

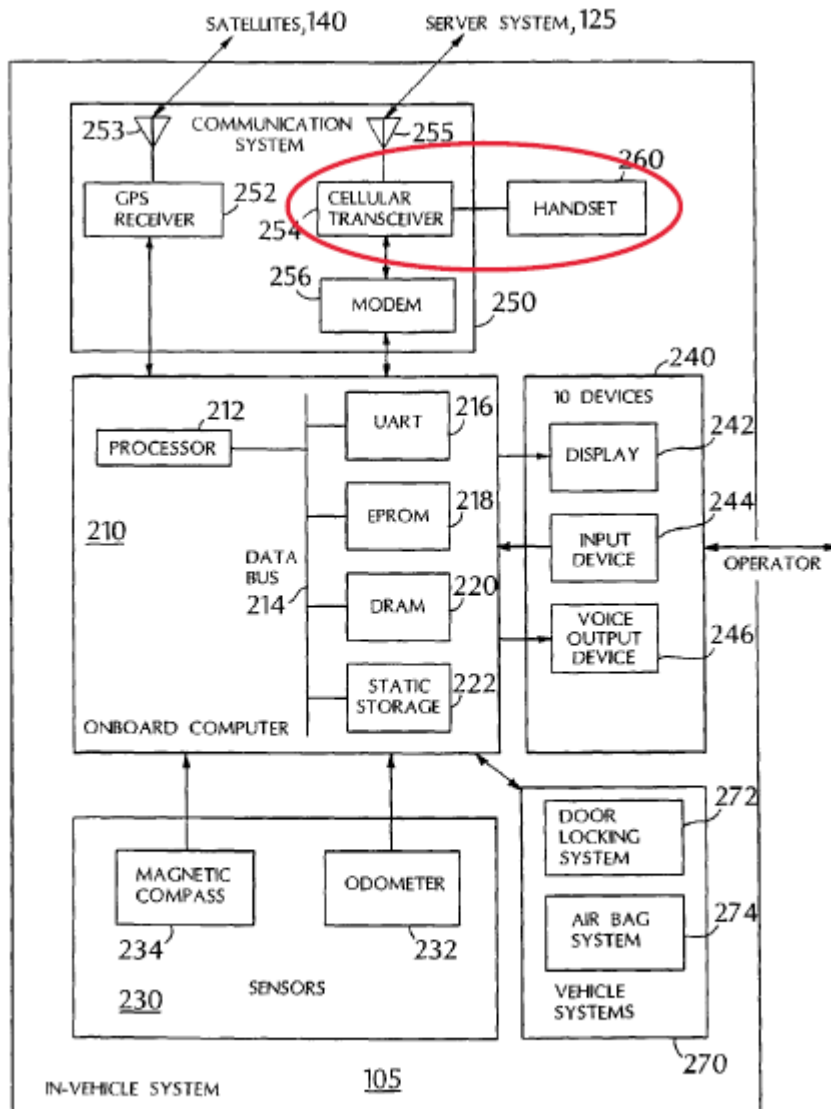


FIG. 2

GM-1004, FIG. 2. The Petition’s primary proposed configuration is therefore just

the simple addition of full cellular phone capabilities (based on the suggestions of Feldman) to Knockeart's system that already includes the main components needed for such functionality. GM-1018, ¶¶7-8.

To be clear, the claims do not require that the claimed cellphones be handheld cellphones or otherwise separate from vehicle mounted cellphones. GM-1018, ¶10. As discussed in the Petition, prior to the priority date of the '028 patent “[a] growing number of mobile wireless communication devices are increasingly being *installed or carried in vehicles*.” Pet., 12 (quoting GM-1005, [0053]). In describing the proposed Knockeart-Feldman combination, the Petition states that “it would have been beneficial to replace, *enhance*, or supplement at least some of *the in-vehicle location tracking systems described by Knockeart* with cellphone-based location tracking.” Pet., 11. That is, the primary configuration for the Knockeart-Feldman combination described in the Petition does not propose a wholesale replacement of Knockeart's navigation system with the specific cellphones of Feldman, but rather that a POSITA would have found it obvious to implement Knockeart's in-vehicle navigation system as a cellphone (either installed in the vehicle or in a handheld form) based on Feldman's suggestion. GM-1003, ¶¶58-67; GM-1018, ¶¶5-8, 10.

2. The Petition's Second Configuration for the Knockeart-Feldman Combination

The Petition also posits “[a]lternatively or additionally, a POSITA would

have been prompted to implement Knockeart's system to utilize Feldman's vehicular traffic data collected by tracking 'vehicle-carried' cellular telephones as one of the external traffic information sources expressly described in Knockeart." Pet., 9-10 (citing GM-1005, [0007]-[0009], [0036], [0038], [0053], [0058]-[0062]; GM-1004, [0077], [0170], [0317]-[0318], [0351]; GM-1003, ¶¶59-60). This second configuration for applying Feldman's suggestions to Knockeart is identified as an alternative configuration in which Feldman's cellphone probes are used to provide an additional traffic information source to Knockeart's system. Pet., 9-10. It is in this second alternative or supplemental configuration that Feldman's disclosed techniques for collecting vehicle traffic probe data would have been used to populate at least some of the traffic information in the combined system. GM-1018, ¶9.

Dr. Braasch confirmed in his initial declaration that this configuration was presented as an "alternative or in addition" to the primary proposed configuration, stating that "[i]n the alternative or in addition to such a modification to Knockeart's system based on Feldman, a POSITA would have been prompted to implement Knockeart's system to utilize Feldman's vehicular traffic data collected by tracking 'vehicle-carried' cellular telephones as one of the external traffic information sources expressly described in Knockeart." GM-1003, ¶66.

B. The Primary Configuration of the Proposed Combination of Knockeart with Feldman Provides All Elements of Claim 1

All of the non-procedural arguments presented in the POR are directed toward only the second, alternative configuration for the Knockeart-Feldman combination presented in the Petition. GM-1018, ¶¶11, 2. Specifically, each of the POR's substantive arguments asserts that various modifications to *Feldman's cellphones* would allegedly be improper. POR, 10-17; GM-1018, ¶¶2, 11. The POR fails entirely to address the Petition's primary argument that it would have been obvious to modify *Knockeart* based on Feldman's suggestions to implement Knockeart's in-vehicle systems as cellphones. *See* GM-1018, ¶¶10-11, 2; GM-1003, ¶¶66, 76, 85, 89, 91, 95, 99, 107, 124, 175.

Specifically, the POR only presents the following substantive arguments with respect to the Knockeart-Feldman combination:

- “A POSITA Would not Modify Feldman with User-Initiated Permissions to Selectively Enable or Disable Access to Cellphone Location Data.” POR, 10-11.
- “Modifying Feldman to Use Cellphones to Collect Location Data Would Contravene the Invention of Feldman.” POR, 12-14.
- “Modifying Feldman to Specialize the Cellphone to Collect and Transmit Location Data Would Contravene an Objective of Feldman.” POR, 14-17.

These arguments only address purported modifications to Feldman's

cellphones. Patent Owner completely ignores the Petition's primary argument, which proposes modifications to Knockart's system in view of Feldman, not the other way around. Pet., 9-15; GM-1003, ¶¶66, 76, 85, 89, 91, 95, 99, 107, 124, 175.¹ Patent Owner's failure to address the Petition's primary configuration for

¹ Contrary to Patent Owner's implied assumption in the POR that the vehicle location determination and reporting techniques described in Knockart (the primary reference) must be abandoned and wholesale replaced by the cellphones of Feldman, Petitioner is not required to adopt all features described in the secondary reference for purposes of showing obviousness. *In re Keller*, 642 F.2d 413, 425 (CCPA 1981) (an obviousness determination is properly based on "what the combined teachings of the references would have suggested to those of ordinary skill in the art."); *see also In re Sneed*, 710 F.2d 1544, 1550 (Fed. Cir. 1983); *In re Mouttet*, 686 F.3d 1322, 1332 (Fed. Cir. 2012) ("It is well-established that a determination of obviousness based on teachings from multiple references does not require an actual, physical substitution of elements."); *Lectrosonics, Inc. v. Zaxcom, Inc.* IPR2018-01129, Paper 33 at 59 (PTAB Jan. 24, 2020 (Designated Precedential April 14, 2020) ("[T]he test for obviousness is what the combined teachings of the references would have suggested to a person with ordinary skill in the art.")

Knockeart-Feldman is fatal to its argument, and the Board should find claims 1-31 invalid for the reasons stated in the Petition. Pet. 15-66.

C. The Secondary Configuration of the Proposed Combination of Knockeart with Feldman Also Provides All Elements of Claim 1

Because Petitioner's primary argument demonstrates the Patent's invalidity, the Board need not reach Petitioner's alternative proposed configuration for Knockeart-Feldman. However, the Petition's proposed alternative configuration for the Knockeart-Feldman combination also provides all elements of claim 1 and therefore demonstrates an additional way in which the combination of Knockeart and Feldman renders obvious the claims challenged by Ground 1. GM-1018, ¶¶12-24; GM-1003, ¶¶68-139.

Feldman describes using cellular phones as probes to gather information for "calculating velocities of vehicles, for example, by acquiring series of exact locations of the vehicles located along roads in known time intervals[.]" GM-1005, [0005]; Pet., 8-9. This includes GPS enabled cellphones "transmitting vehicular locations to" a central traffic server. GM-1005, [0053]. As discussed above, the Petition proposes that "[a]lternatively or additionally" to implementing Knockeart's in-vehicle systems as cellphones, a POSITA would have found it obvious and beneficial to use the cellphone probes of Feldman as an additional source of traffic information for Knockeart's traffic database. Pet., 9-10.

Patent Owner's assertion that a POSITA would not make this modification is based on an incomplete representation of Feldman's teachings. In particular, Patent Owner wrongly claims that "the *only* location information derived from *Feldman's* phones is based on handovers and control messages and is managed by the network and not the cellphone." POR, 10. In reality, tracking of cell tower handovers and control messages is just one of many techniques for collecting traffic data described in Feldman. GM-1018, ¶¶13-14, 19-20; GM-1003, ¶¶56-57, 89. As discussed in section II.C.1, below, Feldman also expressly describes collecting self-reported location information from user's mobile devices. Knockeart's technique for "enabling or disabling" vehicle location tracking therefore would have been directly applicable to the vehicle tracking methods of Feldman, which expressly discusses requiring "the knowledge and consent of the[] drivers" before "[t]racking vehicles." GM-1004, [0324]; GM-1005, [0064]; Pet., 23-24; GM-1003, ¶¶82-85.

Furthermore, even if cell tower handover and control message tracking were the only technique described in Feldman for collecting cellphone location/speed information (they are not), nothing in Feldman precludes the use of Knockeart's technique for "enabling or disabling" vehicle location tracking for this technique for traffic information collection.

- 1. Feldman discloses multiple techniques for collecting traffic information, including self-reporting from GPS enabled**

cellphones

Feldman describes “acquiring *a variety of the vehicular traffic data* and information associated with the oriented road section network, *from a variety of sources*” to calculate “mean normalized travel time (NTT) value for each oriented road section[.]” GM-1005, [0018], Abstract, [0036] (“...combining or fusing of a variety of vehicular traffic data”), [0051]-[0052]; Pet., 8. While it is true that *one* of these sources involves tracking cellphones based on cell tower handovers (*see e.g.*, GM-1005, [0060]), Feldman describes several other sources of traffic data, including the use of cellphones that self-report location information. GM-1018, ¶¶13-20; GM-1003, ¶¶56, 76, 80, 89, 93.

For example, Feldman describes “mobile sensors or electronic devices physically located in or attached to vehicles,” which “automatically transmit vehicle locations to the computerized central traffic data and handling system.” GM-1005, [0007]. Feldman describes that “such prior art techniques make use of well known global positioning system (GPS)” implemented in “mobile wireless devices such as *cellular telephones*, laptop computers, personal digital assistants (PDAs), transceivers and other types of telemetric devices.” *Id.*, [0008]. As discussed in the Petition, such techniques for using GPS enabled cellphones as traffic probes were well known in prior art navigation systems by the ’028 patent’s 2004 priority date. Pet., 15. For example, Simske describes determining traffic

conditions “[b]ased on GPS tracking information *obtained from* other GPS-enabled devices” such as “*a portable telephone*, laptop computer, pager, personal digital assistant, or any other type of portable or mobile unit or device having a GPS receiver.” GM-1006, [0012]-[0013]. In a similar example, Whitsell describes the well-known prior art technique in which “the mobile terminal[s] 50 may include a GPS system” and that “the mobile terminal 50 will likely be a cellular telephone.” GM-1007, 7:54-67, 5:44-45. Indeed, even Patent Owner’s own evidence states that “GPS technology...was not widely adopted *until the early 2000s*.” POR, 16. Stated differently, as the evidence shows, GPS technology *was* widely adopted by the early 2000s, prior to the 2004 priority date of the ’028 patent according to Patent Owner’s own evidence.

In addition, the discussion of using GPS enabled cellphones as a source of traffic probe information contained in Feldman’s background section, Feldman goes on to describe “vehicular traffic data and information *acquired from mobile sensors* of a *cellular phone mobile communication network*.” GM-1005, [0024].

In other words, Feldman expressly describes acquiring this vehicle traffic data from the mobile phones themselves, and not exclusively from monitoring cell tower handovers. GM-1018, ¶¶13-20; GM-1003, ¶¶56, 80, 89, 93.

Notwithstanding Patent Owner’s attempt to put Dr. Braasch on the spot in his deposition, (POR, 8-9 (citing EX2001, 37:23-38:5)), Dr. Braasch clearly identified

the relevant teachings of Feldman regarding self-reporting of location data by cell phones in his declaration. GM-1003, ¶56 (citing GM-1005, [0024]), ¶80, (citing GM-1005, [0035]-[0036], [0053]), ¶89 (citing GM-1005, [0053]), ¶93 (citing GM-1005, [0035], [0008]-[0009]).

In yet another example, Feldman describes that “[a] growing number of mobile wireless communication devices are increasing being installed or carried in vehicles, *and are capable of transmitting vehicular locations to a computerized central data and information receiving and processing system.*” GM-1005, [0053]; *see also* Pet., 8-9, 22, 25-26; GM-1003, ¶¶89, 76, 80. These “mobile wireless communication devices are telemetric devices with *GPS capabilities*” and include “driver-carried devices such as computer laptops *and cellular phones.*” *Id.* Feldman goes on to describe that these mobile devices (such as cellphones) are used as “‘moving’ sensors” and that the central server “obtains the vehicular traffic data and information by ‘push’ or ‘pull’ procedures” such as by “receiving the vehicular traffic data and information that is initiated by the source 62 of the mobile sensors.” GM-1005, [0063].

In addition to this self-reporting of location information from cellphones to the server described in Feldman, the cellphone tracking of non-GPS enabled cellphones through tracking of cell tower handovers is described as another example of “the variety of sources” of vehicular traffic data. GM-1005, [0057]-

[0062]. Feldman is also clear that the system “combines or fuses the acquired vehicular traffic data and information” collected “from several such sources” into “one coherent and complete vehicular traffic situation picture.” *Id.*, [0054].

Therefore, while Patent Owner’s assertion that Feldman “does not want to limit data to ‘specialized’ electronic devices providing dynamic vehicle location and velocity data” (POR, 15) is true, Feldman also does not **exclude** such devices (such as GPS enabled cellphones). Rather, Feldman expressly describes that GPS enabled cellphones that track and self-report location information are one of the “variety of sources” of vehicular traffic data. GM-1005, [0057]-[0062].

Because Feldman expressly describes GPS-enabled cellphones that transmit location information to a central server for purposes of determining traffic conditions (GM-1005, [0053], [0063], [0024], [0007]-[0008]), Patent Owner’s arguments regarding the ability of the combined system to selectively enable or disable tracking of cellphone tower handovers are irrelevant. GM-1018, ¶¶17, 19-20. At least some of the traffic information described in Feldman is collected from self-reporting by GPS enabled cellphones and therefore Knockart’s technique for “enabling or disabling either mode of data collection through the user interface of the in-vehicle system” would have been as applicable to the GPS enabled cellphones of Feldman as it is to Knockart’s unmodified system. GM-1004, [0324]; GM-1018, ¶20. Furthermore, it would not have been necessary to modify

the “cellphones in Feldman to collect and transmit location data” (POR, 12)

because Feldman already expressly describes such functionality. GM-1018, ¶¶2, 20.

2. Even if Feldman were limited to cellphone tower handover-based location tracking, Knockeart’s disclosures regarding selectively enabling and disabling location tracking still would have been applicable to the cellphones of the resulting combination

Even if the POR’s mischaracterization of Feldman’s location information collection techniques were true, Knockeart’s disclosure of “enabling or disabling” location tracking still would have been applicable to the alternative configuration for the Knockeart-Feldman combination. POR, 10; GM-1004, [0324]; GM-1018, ¶¶21-24; GM-1003, ¶¶44, 84-85, 87. Contrary to POR’s arguments, the claims do not require that the cellphones “‘self-report’ their own location.” POR, 2. Rather, independent claim 1 merely requires that “each of the plurality of cell phones further has a user initiated permission set comprised of a list of authorizations that permit a user to *selectively enable or disable access to user cellphone location data*.” Element [1.5]. There is no requirement that the cellphones themselves self-report their locations; they need only provide a list of authorizations to allow the user to enable or disable *access to* user cellphone location data. GM-1018, ¶22.

With this in mind, while it is true that for cellphones described by Feldman that are tracked based on cell tower handovers, “[t]he server of the cellular phone

network monitors [administrative and control] messages” to identify cellphone “movement,” (GM-1005, [0060]), such functionality would not prevent the cell phone network provider from restricting access to such information. GM-1018, ¶¶23-24. A POSITA still would have found it obvious and beneficial to include functionality for enabling or disabling access to such information by the traffic identification and navigation system in the resulting combination (based on the functionality described in Knockart). GM-1018, ¶¶23-24; GM-1003, ¶¶84-85. A POSITA would have recognized that restricting access by the navigation system to such cellphone location data satisfies “selectively enable[ing] or disable[ing] access to user cellphone location data.” GM-1018, ¶¶23-24. This is especially true because Feldman expressly contemplates that, in at least some scenarios “[t]racking vehicles” requires “the knowledge and *consent* of their drivers.” GM-1005, [0064]; GM-1018, ¶22. Knockart provides the express details on how to receive such consent using a list of authorizations for tracking the vehicle’s location presented on the user device. GM-1004, [0324], [0342]; GM-1018, ¶22.

Therefore, even though the administrative and control messages described by Feldman would have been available to the cellular network in the resulting system, a POSITA would have used the functionality for enabling or disabling location tracking to prevent the system from tracking the user’s location and to prevent the cellular network from providing such information to the traffic

determination and navigation system of the resulting combination. GM-1018,

¶¶21-24. As explained by Dr. Braasch in his first declaration, and discussed in the Petition, “protection of a user’s private information, including location information, was a known concern well before 2004 and a POSITA would have been aware of many prior art references disclosing user interfaces that allowed users of mobile devices” to protect their location information. GM-1003, ¶82; *see also id.*, ¶¶39-45 (citing GM-1014, 3:51-54, 4:7-39; GM-1015, Abstract, 7:42-56, 8:11-14, FIG. 6; GM-1016, [0138]-[0139], [0176]; GM-1017, [0007], [0039]-[0040]); Pet., 24.

Nothing in the references, or the proposed alternative configuration for the Knockeart-Feldman combination prevents the user from restricting access to user cellphone location information in such a manner. GM-1018, ¶24. This alternative configuration for Knockeart-Feldman therefore provides another basis for finding the challenged claims obvious.

III. SIMSKE IS A PRIOR ART PRINTED PUBLICATION FOR THE PURPOSES OF THIS IPR PROCEEDING

Contrary to the POR’s arguments, Simske qualifies as a “patent[] and printed publication[]” under § 311(b) at least because it is “an application for patent, published under section 122(b), by another *filed* in the United States before the invention by the applicant for patent” according to §102(e)(1).

The Supreme Court in *Hazeltine* made clear that the prior art date for patent

applications is not the date of publication, but the date of the application's filing.

See Hazeltine Res., Inc. v. Brenner, 382 U.S. 252, 254-55 (1965). The Federal Circuit echoed that holding in *Becton*, where it rejected the argument that a patent that was subsequently revoked could not be “considered . . . to be prior art” in an IPR under pre-AIA § 102(e)(2) as of the “filing date of the application,” even though it “was not made public” until issuance after the priority date. *See Becton, Dickinson & Co. v. Baxter Corp. Englewood*, 998 F.3d 1337, 1345 n.7 (Fed. Cir. 2021) (citing *Hazeltine*, 382 U.S. at 254-56; *see also Purdue Pharma L.P. v. Iancu*, 767 Fed. App'x 918, 920–21, 926 (Fed. Cir. 2019) (nonprecedential) (determining that a § 102(e) patent application publication, “Joshi”, was available as prior art in an IPR). And the Board has long applied pre-AIA § 102(e) in IPRs, finding that the patent applications used as prior art are given priority based on filing date, not publication date. *See, e.g., Patent Qual. Assurance, LLC v. VLSI Tech. LLC*, IPR2021-01229, Paper 129 at 27-29 (PTAB June 13, 2023) (determining challenged claims unpatentable based, in part, on patent application publication available as prior art under §102(e)); *Idle Free Sys., Inc. v. Bergstrom, Inc.*, IPR2012-00027, Paper 14 at 27 (PTAB Jan. 31, 2013) (instituting trial on §102(e) ground based on a patent application publication); *Aquestive Therapeutics, Inc. v. Neurelis, Inc.*, No. IPR2019-00451, 2019 WL 3806127, at *3-4 (PTAB Aug. 13, 2019); *Cardiovascular Sys., Inc. v. Shockwave Med., Inc.*, No. IPR2019-00405,

2019 WL 3001061, at *4 (PTAB July 9, 2019); *see also Ex parte Michael J. May*, Appeal No. 2006-1776, 2007 WL 7751834 *5 (BPAI Apr. 30, 2007) (“Section 102(e)(1) gives prior art effect to U.S. patent application publications . . . as of the earliest U.S. effective filing date.”).

Nothing in § 311(b) states otherwise or changes this long-followed regime. Instead, that provision articulates the categories of documents that can be used to challenge a patent in an IPR—“patents” and “printed publications”—not how the priority date of those documents is determined. There is no dispute that that Simske is a printed publication, thus qualifying for use in an IPR under § 311(b). The question of Simske’s effective date is answered by § 102(e)(1), which specifies that date as the date of the application.

The only authority Patent Owner points to in support of its position is the *In re Klopfenstein* case, which has nothing to do with the relevant issue. Indeed, that case is about public accessibility under §102(a), not whether § 102(e) can properly be used in determining the priority date. Simske, as a patent application publication, is indisputably a “printed publication” and qualifies as prior art at least under pre-AIA §102(e) consistent with the PTAB’s long-standing practice. Patent Owner provides no relevant case law to the contrary, and the Board should reject its argument.

IV. THE POR DOES NOT SEPARATELY ADDRESS THE DEPENDENT CLAIMS

The POR presents no additional arguments that address the additional recitations of the dependent claims, therefore each of Grounds 1-7 renders obvious the respective challenged claims for the reasons discussed in the Petition and above.

V. CONCLUSION

For the reasons discussed above, Petitioners request that the Board find all challenged claims (claims 1-31) invalid.

Respectfully submitted,

Dated: June 7, 2024

/Patrick J. Bisenius/
Timothy W. Riffe, Reg. No. 43,881
Patrick J. Bisenius, Reg. No. 63,893
Fish & Richardson P.C.
60 South Sixth Street, Suite 3200
Minneapolis, MN 55402
T: 612-335-5070
F: 877-769-7945

Attorneys for Petitioner

CERTIFICATION UNDER 37 CFR § 42.24(d)

Under the provisions of 37 CFR § 42.24(d), the undersigned hereby certifies that the word count for the foregoing Petitioner's Reply to Patent Owner's Response totals 4,223, which is less than the 5,600 allowed under 37 CFR § 42.24.

Respectfully submitted,

Dated: June 7, 2024

/Patrick J. Bisenius/
Timothy W. Riffe, Reg. No. 43,881
Patrick J. Bisenius, Reg. No. 63,893
Fish & Richardson P.C.
60 South Sixth Street, Suite 3200
Minneapolis, MN 55402
T: 612-335-5070
F: 877-769-7945

Attorneys for Petitioner

CERTIFICATE OF SERVICE

Pursuant to 37 CFR § 42.6(e)(4), the undersigned certifies that on June 7, 2024, a complete and entire copy of this Petitioner's Reply to Patent Owner's Response and Exhibit 1018 were provided by email, to the Patent Owner, by serving the correspondence email address of record as follows:

Barry J. Bumgardner
BARRY BUMGARDNER LAW, PLLC
3131 W. 7th Street, Suite 300
Fort Worth, Texas 76107

Jeffrey R. Ambroziak
FISHERBROYLES LLP
445 Park Avenue, Ninth Floor
New York, NY 10022

Email: barry@barrybumlaw.com
jeffrey.ambroziak@fisherbroyles.com

/Diana Bradley/
Diana Bradley
Fish & Richardson P.C.
60 South Sixth Street, Suite 3200
Minneapolis, MN 55402
(858) 678-5667