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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* ROMAN BRUSILOVSKY, JOSEPH JAMES SALVO,  
JOHN WILLIAM CARBONE, DANIEL JOHN MESSIER, DOUGLAS  
PETERS, BEN NIELSEN, and MATTHEW JOHN ENGLUND

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Appeal 2014-006136  
Application 13/594,613<sup>1</sup>  
Technology Center 3600

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Before MICHAEL C. ASTORINO, NINA L. MEDLOCK, and  
ROBERT J. SILVERMAN, *Administrative Patent Judges*.

SILVERMAN, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

The Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's  
decision rejecting claims 1–25. We have jurisdiction under 35 U.S.C.  
§ 6(b).

We AFFIRM.

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<sup>1</sup> According to the Appellants, the real party in interest is General Electric  
Company. Appeal Br. 4.

### ILLUSTRATIVE CLAIM

1. A system comprising:

a controller that is operable to receive information for a mobile asset from which a location envelope in which the mobile asset is located, an indicated direction of travel of the mobile asset, and an indicated speed of the mobile asset can be derived, the controller also operable to derive, at a sample time, the location envelope, the indicated speed, and the direction of travel and to select a first governing speed for the mobile asset based at least in part on the derived location envelope and the direction of travel.

### CITED REFERENCES

The Examiner relies upon the following references:

Kaneko et al. (hereinafter “Kaneko”)	US 6,115,668	Sept. 5, 2000
Rothschild	US 2007/0067086 A1	Mar. 22, 2007
White et al. (hereinafter “White”)	US 2007/0200663 A1	Aug. 30, 2007
Follmer et al. (hereinafter “Follmer”)	US 2008/0258890 A1	Oct. 23, 2008
Knockeart et al. (hereinafter “Knockeart”)	US 7,706,967 B2	Apr. 27, 2010

### REJECTIONS

I. Claims 1–23 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1–5, 7, 8, 12–16, 18–21, 23–25, 27–35, and 37 of US 8,275,480.

II. Claims 1–6, 8–12, 14, 15, 18–20, 24, and 25 are rejected under 35 U.S.C. § 103(a) as unpatentable over Knockeart and Follmer.

III. Claims 7, 13, 16, and 17 are rejected under 35 U.S.C. § 103(a) as unpatentable over Knockeart, Follmer, and Kaneko.

IV. Claim 21 is rejected under 35 U.S.C. § 103(a) as unpatentable over Knockeart, Follmer, and Rothschild.

V. Claims 22 and 23 are rejected under 35 U.S.C. § 103(a) as unpatentable over Knockeart, Follmer, and White.

#### FINDINGS OF FACT

We rely upon and adopt the Examiner's findings stated in the Final Office Action at pages 7–38 and the Answer at pages 3–45. Additional findings of fact may appear in the Analysis below.

#### ANALYSIS

##### *Rejection I*

The Appellants do not address the nonstatutory obviousness-type double patenting rejection of claims 1–23, except to say that, although the Appellants do not necessarily agree with the rejection, the Appellants will submit a Terminal Disclaimer in order to overcome the rejection. Appeal Br. 15–16; Reply Br. 2. On the record before us, addressing the double-patenting rejection would be premature. We therefore do not reach the obviousness-type double-patenting rejection of claims 1–23.

##### *Rejection II*

###### *Independent Claims 1 and 8*

Independent claims 1 and 8 are argued as a group. Appeal Br. 16–21. Claim 1 is selected for analysis herein. *See* 37 C.F.R. § 41.37(c)(1)(iv).

Claim 1 recites, in part, a “controller” that is “operable” “to select a first governing speed for the mobile asset based at least in part on the derived location envelope and the direction of travel.”

According to the Examiner, the claim limitation at issue is an obvious combination of teachings found in Knockeart and Follmer. Final Action

7–8. Specifically, Knockeart employs information regarding the orientation of a moving vehicle (i.e., the claimed “direction of travel”) to ascertain — from among the various road segments near the vehicle — the road segment on which the vehicle is actually traveling. Final Action 7; Answer 38 (quoting Knockeart, col. 27, ll. 36–44). The Examiner explains that each road segment is associated with speed limit information (i.e., the claimed “governing speed”). Final Action 7 (citing Knockeart, col. 34, ll. 57–67, col. 35, ll. 1–60); Answer 40 (quoting Knockeart, col. 35,<sup>2</sup> ll. 3–9). The Final Action combines the foregoing teachings of Knockeart with Follmer’s teaching of using the road identification to find its corresponding speed limit (the “governing speed” of claim 1), rendering obvious the limitation at issue. Final Action 8 (quoting Follmer ¶ 78); *see also* Answer 40.

The Appellants argue that the cited Knockeart reference does not teach using the “direction of travel” to “select a first governing speed” and instead teaches away from the claimed recitation. Appeal Br. 17–19. Specifically, the Appellants contend that Knockeart’s orientation information may be used to determine the starting location of the vehicle when the vehicle is not moving. Appeal Br. 17.

Yet, claim 1 does not require a moving vehicle and, in any event, the cited portion of Knockeart does not say that its orientation information must relate to a non-moving vehicle. Further, contrary to the Appellants’ assertion, the cited portion of Knockeart does not say that orientation

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<sup>2</sup> The Answer’s citation to column 34 of Knockeart (Answer 40) — rather than column 35 — is evidently an inadvertent typographical error, because the quoted text on page 40 of the Answer appears in column 35 of Knockeart.

information is used to determine a starting location. The portion of Knockeart relied upon in the Answer states:

[T]he in-vehicle system also sends speed and orientation data. The orientation can be obtained from either past consecutive GPS location estimates, or from the magnetic compass. The speed and orientation information is used by the server system, for example, to disambiguate which of a number of nearby road segments the vehicle is on based on the class of road segments and the allowable directions of travel on those segments.

Knockeart, col. 27, ll. 37–44.

Contrary to the Appellants’ arguments (Appeal Br. 18–19), Knockeart does not teach away from using a “direction of travel” to determine either the road segment being traveled or its “governing speed.” The portions of Knockeart that the Appellants rely upon, as supposedly teaching away from the claimed invention, refer to a dead reckoning technique for estimating a vehicle’s location while following a planned route (Knockeart, col 23, ll. 1–4) and a database containing expected travel speeds for various roads (Knockeart, col. 34, ll. 58–61). Yet, these portions of Knockeart do not detract from the teachings relied upon in the rejection of claim 1. In addition, neither portion criticizes, discredits, or discourages the approach employed in claim 1, nor do the Appellants allege otherwise. Accordingly, the Appellants do not show that Knockeart teaches away from claim 1. *See In re Fulton*, 391 F.3d 1195, 1201 (Fed Cir. 2004).

With regard to Follmer, the Appellants argue that Follmer does not employ the “direction of travel” to determine the “governing speed”; rather, Follmer relies upon the vehicle’s location to ascertain the road being traveled and finds a “governing speed” associated with that road. Appeal Br. 19–20 (citing Follmer ¶ 78).

Yet, the Appellants evaluate Follmer’s teachings in isolation, rather than in combination with Knockeart’s teachings, as set forth in the Final Office Action, whereby Knockeart’s use of the “direction of travel” to identify the road being traveled is combined with Follmer’s association of an identified road with a “governing speed.” *See* Final Action 8.

Further, the Appellants’ criticism (Appeal Br. 20) that Follmer’s use of GPS data would give rise to potential inaccuracy, regarding the road being traveled, is not commensurate with the claim language and, in any event, fails to acknowledge the combination of prior art teachings — including Knockeart’s use of the “direction of travel” for road identification (Final Action 7) — in the rejection.

In view of the foregoing, the Appellants’ arguments are unpersuasive of Examiner error in rejecting claim 1.

Accordingly, the rejection of claims 1 and 8 under 35 U.S.C. § 103(a) is sustained.

*Dependent Claim 3*

Claim 3, which depends indirectly from independent claim 1, recites, in part:

wherein the possible route segments in the set of possible route segments are associated with allowed directions of travel, and the controller is operable to select the first governing speed by eliminating one or more of the possible route segments from the set of possible route segments based at least in part on the indicated direction of travel of the mobile asset being inconsistent with the allowed directions of travel associated with the one or more of the possible route segments.

The Appellants argue that claim 3 was rejected erroneously, based upon the arguments discussed above, in regard to claim 1 — specifically, the

alleged failure of Knockeart and Follmer to disclose the selection of a “first governing speed” based upon a “direction of travel.” Appeal Br. 25.

In view of the foregoing analysis regarding claim 1, the Appellants’ argument on behalf of claim 3 is unpersuasive. The rejection of claim 3 under 35 U.S.C. § 103(a) is sustained.

*Dependent Claim 10*

Claim 10, which depends indirectly from independent claim 8, recites, in part:

wherein the possible route segments in the set of possible route segments are associated with allowed directions of travel, and selecting the first governing speed includes eliminating one or more of the possible route segments from the set of possible route segments based at least in part on the indicated direction of travel of the mobile asset being inconsistent with the allowed directions of travel associated with the one or more of the possible route segments.

The Appellants contend that claim 10 was rejected erroneously, relying upon the arguments presented in regard to claim 1, to the effect that Knockeart and Follmer do not disclose selecting a “first governing speed” based, at least in part, upon a “direction of travel.” Appeal Br. 25–26.

In view of the foregoing analysis regarding claim 1, the Appellants’ argument on behalf of claim 10 is unpersuasive. The rejection of claim 10 under 35 U.S.C. § 103(a) is sustained.

*Independent Claim 14*

Independent claim 14 recites, in part, “a processor” that is configured to identify a first route segment from the potential route segments based at least in part on a comparison of the indicated direction of travel of the mobile asset with the directions of travel associated with the potential route segments.

The Appellants contend that the cited Knockeart and Follmer references, whether considered alone or in combination, fail to teach this limitation. Appeal Br. 21. Specifically, the Appellants rely on the arguments presented in regard to claim 1, in support of the position that Knockeart does not use a “direction of travel” to determine the road traveled. *Id.* at 22. Further, the Appellants argue that Knockeart’s disclosure of a particular dead reckoning procedure teaches away from using the “direction of travel” to determine the road being traveled. *Id.* at 22–23 (citing Knockeart, col. 23, ll. 1–4).

To the contrary, as set forth in the Final Office Action, Knockeart teaches the recited limitation in its disclosed use of vehicle speed and orientation information to “disambiguate which of a number of nearby road segments the vehicle is on based on the class of road segments and the allowable directions of travel on those segments.” Final Action 15–16 (quoting Knockeart, col. 27, ll. 36–44). The Appellants do not show that Knockeart teaches away from the claim limitation at issue, because the identified portion of Knockeart is not alleged to criticize, discredit, or discourage the approach employed in claim 14. *See Fulton*, 391 F.3d at 1201.

The Appellants also argue that Follmer does not teach the claim limitation at issue (Appeal Br. 23); however, the Final Office Action relies upon Knockeart — not Follmer — as teaching the limitation (*see* Final Action 15–16 (citing Knockeart, col. 27, ll. 36–44)).

The Appellants’ arguments regarding claim 14 are unpersuasive. The rejection of claim 14 under 35 U.S.C. § 103(a) is sustained.

*Dependent Claim 15*

Claim 15, which is dependent upon independent claim 14, recites:

wherein the processor is configured to identify the first route segment by eliminating the potential route segments that are associated with the directions of travel that do not match the indicated direction of travel of the mobile asset.

The Appellants contend that claim 15 was rejected erroneously, relying upon the arguments presented in regard to claim 14. Specifically, the Appellants argue that because Knockeart and Follmer allegedly do not disclose claim 14's "identify[ing] a first route segment" based upon comparing "the indicated direction of travel of the mobile asset with the directions of travel associated with the potential route segments," the references cannot disclose claim 15's "identify[ing] the first route segment by eliminating the potential route segments that are associated with the directions of travel that do not match the indicated direction of travel of the mobile asset." Appeal Br. 26–27.

In view of the foregoing analysis regarding claim 14, the Appellants' argument on behalf of claim 15 is unpersuasive. The rejection of claim 15 under 35 U.S.C. § 103(a) is sustained.

*Dependent Claim 24*

Claim 24, which is dependent upon independent claim 1, recites, in part:

wherein the controller is operable to select the first governing speed by generating a set of possible route segments that the mobile asset could be traveling on within the location envelope, the controller being operable to select the first governing speed by eliminating one or more of the possible route segments from the set of possible route segments based at least in part on a most feasible route determined for the mobile asset.

The Examiner finds that Knockeart teaches this limitation, by disambiguating which road, out of multiple roads, a vehicle is traveling. Final Action 23 (citing Knockeart, col 27, ll. 36–44); *see also* Answer 43.

The Appellants contend that claim 24 was rejected erroneously because it depends from claim 1, which is alleged to have been rejected erroneously. Appeal Br. 28. However, as explained above, the Appellants' arguments regarding claim 1 are not persuasive of error.

The Appellants also contend that claim 24 was rejected erroneously because Knockeart does not teach the claimed “eliminating one or more of the possible route segments from the set of possible route segments based at least in part on a most feasible route determined for the mobile asset.” *Id.* at 28–29. The Appellants rely upon the argument presented in regard to claim 1, to the effect that “Knockeart does not disclose using the speed and orientation information to determine which particular road segment of a planned route that the vehicle is currently traveling on.” *Id.*; *see also* Reply Br. 11. The Appellants argue that Knockeart's techniques instead “assume that the vehicle is properly following the planned route.” Appeal Br. 29.

Yet, as discussed above (in regard to claim 1), the Appellants' characterization of Knockeart is not accurate. In any event, the Appellants do not address Knockeart's disclosure of selecting one road segment out of a number of road segments, regardless of the criteria employed, which the Examiner discussed (Final Action 23; Answer 43). Therefore, the Appellants' arguments are not persuasive.

The rejection of claim 24 under 35 U.S.C. § 103(a) is sustained.

*Dependent Claim 25*

Claim 25, which is dependent upon independent claim 1, recites:

wherein the controller is operable to select the first governing speed by generating a set of possible route segments that the mobile asset could be traveling on within the location envelope, the location envelope and the indicated direction of travel being fed into route optimization software that generates a most feasible route of the mobile asset based on the location envelope and the indicated direction of travel, the controller being operable to select the first governing speed by eliminating one or more of the possible route segments from the set of possible route segments based the one or more of the possible route segments being inconsistent with the most feasible route.

Reprising arguments advanced in regard to claim 24, the Appellants contend that Knockart does not use speed and orientation information to eliminate one or more possible road segments as being inconsistent with a most feasible route; rather, Knockart's techniques assume that the vehicle is following a planned route. Appeal Br. 30–31. The Appellants further contend that Knockart does not teach the selection of a route based upon an “indicated direction of travel.” *Id.* at 31.

Yet, the Appellants (Appeal Br. 30–31) do not address the disclosure of Knockart that the Examiner relies upon, which discloses determining which road, out of various roads, is being traveled, based upon vehicle position, speed, and orientation data (i.e., the claimed “indicated direction of travel”) (Final Action 25 (citing Knockart, col. 27, ll. 36–44)).

In addition, the Appellants' Reply Brief states, without explanation, that the Examiner's Answer does not identify any disclosure of Knockart that teaches or suggests the quoted and paraphrased language of claim 25. Reply Br. 12–13. This does not amount to a persuasive argument. *See*

37 C.F.R. § 41.37(c)(1)(iv) (“A statement which merely points out what a claim recites will not be considered an argument for separate patentability of the claim.”)

Accordingly, the Appellants’ arguments relating to claim 25 are unpersuasive.

The rejection of claim 25 under 35 U.S.C. § 103(a) is sustained.

### ***Rejection III***

The Appellants do not separately argue dependent claims 7, 13, 16, and 17 except to assert that Kaneko does not cure the alleged deficiencies in the Examiner’s rejection of independent claims 1, 8, and 14, and that the dependent claims are allowable based on their dependence from claims 1, 8, and 14. Appeal Br. 31–32.

For the reasons given above, regarding independent claim 1 (from which claim 7 depends), independent claim 8 (from which claim 13 depends), and independent claim 14 (from which claims 16 and 17 depend, whether directly or indirectly), the rejection of claims 7, 13, 16, and 17 under 35 U.S.C. § 103(a) is sustained.

### ***Rejection IV***

#### ***Dependent Claim 21***

Claim 21, which depends from independent claim 14, recites:

The system of claim 14, wherein, when at least one of the potential route segments is not associated with a respective governing speed, the processor is configured to designate an inferred governing speed for the at least one of the potential route segments based on the governing speeds of one or more of the potential route segments that are adjacent to the at least one of the potential route segments.

The Appellants contend that claim 21 was rejected erroneously, in view of the arguments presented for its base claim 14. Appeal Br. 27. As discussed above, those arguments are not persuasive.

The Appellants also contend that claim 21 was rejected erroneously because Rothschild does not teach the recited “designat[ing] an inferred governing speed” based upon “the governing speeds of one or more of the potential route segments that are adjacent to the at least one of the potential route segments.” Appeal Br. 27. Rather than inferring a “governing speed” based upon “adjacent” “route segments,” the Appellants argue that Rothschild merely “looks to speed limit indications that are posted earlier on the same road or waterway that the driver or boater is currently on.” *Id.* at 28; *see also* Reply Br. 10.

In response, the Examiner points out that the claimed “adjacent” “route segment” may be a portion of the route on which a vehicle is traveling, such that Rothschild teaches the limitation at issue. Answer 43.

Indeed, the claim language calling for inferring a “governing speed” based upon that of an “adjacent” “route segment” is broad enough to encompass a “route segment” previously traveled. The Specification supports this understanding, by explaining that “[a] road segment is broadly defined as a segment of road between interchanges in a single direction of travel.” Spec. ¶ 15. Although the Specification here uses the expression “road segment,” rather than the claimed “route segment,” the Specification reveals that a “route” may include various “road segments.” *See* Spec. ¶ 23 (“Possible road segments can be compared to road segments present in the preplanned route, and those possible road segments inconsistent with the preplanned route may be eliminated.”)

Accordingly, the Appellants' argument is not persuasive of error in the rejection of claim 21. The rejection of claim 21 under 35 U.S.C. § 103(a) is sustained.

***Rejection V***

The Appellants do not separately argue claims 22 and 23 except to assert that White does not cure the alleged deficiencies in the Examiner's rejection of independent claim 4, and that claims 22 and 23 are allowable based on their dependence from claim 14. Appeal Br. 31–32. For the reasons given above, regarding independent claim 14, the rejection of claims 22 and 23 under 35 U.S.C. § 103(a) is sustained.

**DECISION**

We AFFIRM the Examiner's decision rejecting claims 1–25 under 35 U.S.C. § 103(a).

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

**AFFIRMED**