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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* PETER TREMAN, JACOB GAISKI,  
MATTHEW CHARLES CROSS, and  
KAREN S. MACEACHERN

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Appeal 2019-000091  
Application 15/184,382  
Technology Center 2600

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Before ELENI MANTIS MERCADER, NORMAN H. BEAMER,  
and GARTH D. BAER, *Administrative Patent Judges*.

BEAMER, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant<sup>1</sup> appeals under 35 U.S.C. § 134(a) from the Examiner's final rejection of claims 1–20. We have jurisdiction over the pending rejected claims under 35 U.S.C. § 6(b).

We AFFIRM.

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<sup>1</sup> We use the word “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies the real party in interest as Ford Global Technologies, LLC. (Appeal Br. 2.)

## THE INVENTION

Appellant's disclosed and claimed invention is directed to dynamic localized coordinate download in which a vehicle will have time to download new local data before reaching a local data set perimeter. (Spec. ¶¶ 1, 6.)

Independent claims 1, 6, and 16, reproduced below, are illustrative of the subject matter on appeal:

1. A system comprising:
  - a processor configured to:
    - receive vehicle speed and heading;
    - define a first local data set of map data around a vehicle location bounded by a perimeter projected to be reachable by a vehicle traveling within the perimeter within a predetermined amount of time, based on the received speed and heading;
    - define a geo-fence within and at a distance from the perimeter such that a vehicle reaching the geo-fence at the received speed will have time to download a second local data set before reaching the first local data set perimeter;
    - and
    - send the geo-fence definition and first data set to the vehicle.
  
6. A system comprising:
  - a processor configured to:
    - responsive to a local data request, define a local data boundary and a geo-fence within the boundary for triggering an additional-data request based on a vehicle speed and data download speed, the local data boundary defined by coordinates projected to be reachable by a vehicle within a predetermined time period; and
    - transmit the geo-fence and map data within the local data boundary to a vehicle.

16. A system comprising:
  - a processor configured to:
    - receive local map data, a geo-fence around a present vehicle location and contained within an outer boundary of the map data, and maximum expected travel speed;
    - track vehicle progress until the geo-fence is encountered;
    - request new local map data upon encountering the geo-fence; and
    - redefine the geo-fence to be closer to a vehicle location than the received geo-fence responsive to vehicle speed exceeding the maximum expected travel speed.

### REJECTIONS

The Examiner rejected claims 1, 2, and 4–19 under 35 U.S.C. § 103 as being unpatentable over Boes et al (US 2014/0278090 A1; pub. Sept. 18, 2014, hereinafter “Boes”) and Zeng (US 2014/0121932 A1; pub. May 1, 2014). (Final Act. 7–21.)

The Examiner rejected claim 3 under 35 U.S.C. § 103 as being unpatentable over Boes, Zeng, and Chmaytelli et al (US 2002/0194325 A1; pub. Dec. 19, 2002, hereinafter “Chmaytelli”). (Final Act. 21–23.)

The Examiner rejected claim 20 under 35 U.S.C. § 103 as being unpatentable over Boes, Zeng, and Leblond (US 2012/0281091 A1; pub. Nov. 8, 2012). (Final Act. 23–24.)

### ISSUES ON APPEAL

Appellant’s arguments in the Appeal Brief present the following issues:<sup>2</sup>

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<sup>2</sup> Rather than reiterate the arguments of Appellant and the positions of the Examiner, we refer to the Appeal Brief (filed Apr. 9, 2018, hereinafter

*Issue One:* Whether the Examiner erred in finding the combination of Boes and Zeng teaches or suggests

a first local data set of map data around a vehicle location bounded by a perimeter projected to be reachable by a vehicle traveling within the perimeter within a predetermined amount of time and

a geo-fence within and at a distance from the perimeter such that a vehicle reaching the geo-fence at the received speed will have time to download a second local data set before reaching the first local data set perimeter,

as recited in independent claim 1. (Appeal Br. 5–7; *see also* Reply Br. 2–3.)

*Issue Two:* Whether the Examiner erred in finding the combination of Boes and Zeng teaches or suggests “responsive to a local data request, define a local data boundary and a geo-fence within the boundary for triggering an additional-data request based on a vehicle speed and data download speed,” as recited in independent claim 6. (Appeal Br. 7; *see also* Reply Br. 3–4.)

*Issue Three:* Whether the Examiner erred in finding the combination of Boes and Zeng teaches or suggests “receive local map data, a geo-fence around a present vehicle location and contained within an outer boundary of the map data, and maximum expected travel speed,” as recited in independent claim 16. (Appeal Br. 7–9; *see also* Reply Br. 4–5.)

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“Appeal Br.”); the Reply Brief (filed Oct. 3, 2018, hereinafter “Reply Br.”); the Final Office Action (mailed Jan. 11, 2018, hereinafter “Final Act.”); and the Examiner’s Answer (mailed Aug. 3, 2018, hereinafter “Ans.”) for the respective details.

## ANALYSIS

We have reviewed the Examiner’s rejections in light of Appellant’s arguments that the Examiner errs. We disagree with Appellant’s arguments, and we adopt as our own: (1) the pertinent findings and reasons set forth by the Examiner in the Action from which this appeal is taken (Final Act. 2–26); and (2) the corresponding reasons set forth by the Examiner in the Examiner’s Answer in response to Appellant’s Appeal Brief. (Ans. 3–8). We concur with the applicable conclusions reached by the Examiner and emphasize the following.

### *First Issue*

In finding that the combination of Boes and Zeng teaches or suggests the claim 1 limitations at issue, the Examiner relies on Boes’s disclosure of a vehicle computing system that identifies relevant points of interest (“POI”) in which the vehicle could “guess” at which time the vehicle could pass through POIs. (Final Act. 7–8; *see also* Boes, Abstract, ¶¶ 47–50, 31–32, and Fig. 4B.)

Appellant argues that regarding Boes,

[n]owhere is a perimeter as claimed, described. And even if the “traveling boundary” of paragraph 50 were considered to be the initial perimeter, the process never *defines* a second geo-fence within that perimeter, and especially not a geo-fence that is defined with the specific condition that it be “far enough away from the perimeter such that a vehicle reaching the geo-fence has time to download a new local data set before hitting the perimeter.”

(Reply Br. 3.)

We are not persuaded. The Examiner finds, and we agree, that “[Boes’s] geo-fence data associate with [a POI] which equate[s] to the

second local data in the claim [and] can be downloaded by identifying that the car [is] within or close to the perimeter/geofence created by the car” (Ans. 5), and that “[e]stimating a reaching point of interest according to vehicle speed and estimating a distance point to start the download of the POI data is taught in [the] Boes reference but [Boes uses] different language description than claim 1.” (Ans. 6 (emphasis omitted).)

We agree with the Examiner that the language differences between Boes and the claims does not discredit the teachings of Boes to one skilled in the art, because an obviousness analysis is not an *ipsissimis verbis* test. Cf. *In re Gleave*, 560 F.3d 1331, 1334 (Fed. Cir. 2009) (noting that, in an anticipation analysis, “the reference need not satisfy an *ipsissimis verbis* test”).

Here, Boes suggests that “[s]ince many POIs along a route may be passed quickly, and may have smaller geo-fences associated with them, it may be useful to pre-load the geo-fences and/or POI information for various features projected to be along a route” (Boes ¶ 43; *see also* Final Act. 8) and further suggests that parameters such as perimeter be adjusted in order to “provid[e] extra time for data transfer.” (Boes ¶ 50; *see also* Final Act. 7–8.)

Thus, Boes provides the elements and the motivation to construct a system whose goal matches that of “a vehicle reaching the geo-fence perimeter at the received speed will have time to download new local data before reaching the local data set perimeter and send the geo-fence definition and coordinate data within the local data set to the vehicle” (Spec. ¶ 6) with a slight change in terminology. A skilled artisan would “be able to fit the teachings of multiple patents together like pieces of a puzzle” using the

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combination of Boes and Zeng, because the skilled artisan is “a person of ordinary creativity, not an automaton.” *See KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 420–21.

Accordingly, we affirm the Examiner’s rejection of independent claim 1, and dependent claims 2–5 not argued separately with particularity. (*See* Appeal Br. 5–7 and 9.)

### *Second Issue*

Appellant argues that

even if paragraph 50 of Boes is read as teaching defining a local data boundary, there is nothing where the same processor that defines this boundary “defines a geo-fence within this boundary for triggering an additional data-request.” In Boes, the boundary is a proxy for a larger vehicle size that can cause a coincidence of vehicle location (by essentially faking a large scale vehicle location) with a pre-existing geo-fence around a POI.

(Reply Br. 4.)

We are not persuaded. The Examiner finds, and we agree, that

[t]he second boundary geo-fence created is obvious using the transfer data time to advance the triggering point of the downloadable time (See [Boes ¶¶ 32, 50]). Both perimeter data are compared when reach or within each other in order to trigger download and playback information of POI (See [Boes ¶¶ 39–40, 51–52]).

(Ans. 7.)

Again, independent claim 6 uses slightly different terminology to arrive at the same goal of Boes: to ensure that parameters such as the claimed “local data boundary” are defined such that prior to a vehicle

passing by a boundary, an additional data request is triggered such that the data arrives prior to the time it is relevant, based on vehicle speed and data download speed. The combination of Boes and Zeng provide the teachings and motivation, as shown similarly above regarding claim 1.

Accordingly, we affirm the Examiner's rejection of independent claim 6, and dependent claims 7–15 not argued separately with particularity. (*See* Appeal Br. 7–9.)

### *Third Issue*

Appellant argues that

the Examiner appears to equate the geo-fence provided by the tracking server to be the perimeter around the vehicle. Since this is a mobile perimeter, the vehicle will never encounter the geo-fence and thus it is utterly impossible for the prior art to teach “track vehicle progress until the geo-fence is encountered” because this prior-art fence is by definition a un-encounterable fence as it moves with the vehicle.

(Appeal Br. 7–8 (emphasis omitted).) Appellant further contends that

there is no way any geo-fence of Boes could actually meet the single geo-fence limitations of the claims, and the Examiner cannot bounce between characteristics of both a perimeter around a vehicle for *detecting* geo-fences and a geo-fence around a POI to “aggregate” characteristics of the geo-fence of the claims, because the claimed geo-fence would serve no discernable purpose in Boes if the aspects were aggregated as alleged.

(Reply Br. 8 (emphasis omitted).)

We are not persuaded. The Examiner finds, and we agree, that

virtual vehicle perimeter is defined in [Boes ¶ 50] taking into account of vehicle speed and downloadable time. Multiple virtual perimeters will be created along the way.

The virtual perimeter created at one point will eventually be reached at another point in time (See [Boes ¶ 32]). During the travel, many geo-fences associated with [POIs] will be trigger[ed] as per vehicle perimeter and geo-fence data comparison.

(Ans. 8.) Here, one skilled in the art would equate the sizing of perimeter made by Boes (*see* Boes ¶ 50) as dependent upon both “estimate[d] arrival times based on known travel data” (*id.* ¶ 32) and data download time so that the goal attained by both Boes and the claimed invention is that data is downloaded before it is needed for use. (*See id.* ¶ 50.)

Accordingly, we affirm the Examiner’s rejection of independent claim 16, and dependent claims 17–20 not argued separately with particularity. (*See* Appeal Br. 8–9.)

### CONCLUSION

In summary:

<b>Claims Rejected</b>	<b>Basis</b>	<b>Affirmed</b>	<b>Reversed</b>
1, 2, 4–19	§ 103 Boes, Zeng	1, 2, 4–19	
3	§ 103 Boes, Zeng, Chmaytelli	3	
20	§ 103 Boes, Zeng, Leblond	20	
<b>Overall Outcome</b>		1–20	

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED