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46442	7590	03/02/2020	EXAMINER	
CARLSON, GASKEY & OLDS, P.C./Ford			TRIVEDI, ATUL	
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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* JAMES MATTHEW MARCICKI

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Appeal 2019-004115  
Application 15/355,102  
Technology Center 3600

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BEFORE WILLIAM A. CAPP, JEREMY M. PLENZLER, and  
RICHARD H. MARSCHALL, *Administrative Patent Judges*.

PLENZLER, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant<sup>1</sup> appeals from the Examiner's decision to reject claims 1–20. We have jurisdiction under 35 U.S.C. § 6(b).

We REVERSE.

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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(a). Appellant identifies the real party in interest as Ford Global Technologies, LLC. Appeal Br. 1.

### CLAIMED SUBJECT MATTER

The claims are directed to electric vehicle battery management.

Claim 1, reproduced below, is illustrative of the claimed subject matter:

1. A method, comprising:  
determining a plurality of possible routes for a desired destination based on an input to a navigation system; and  
controlling an electrified vehicle based on a route selected from the plurality of possible routes to achieve a desired thermal management of a battery.

### REFERENCES

The prior art relied upon by the Examiner is:

Name	Reference	Date
Dyer	US 2012/0043943 A1	Feb. 23, 2012
Hettrich	US 2016/0059733 A1	Mar. 3, 2016

### REJECTIONS

Claims 1–10, 12–14, and 16–19 are rejected under 35 U.S.C. § 102(a)(1) as being anticipated by Hettrich.

Claims 11, 15, and 20 are rejected under 35 U.S.C. § 103 as being unpatentable over Hettrich and Dyer.

### OPINION

The claims each require “determining a plurality of possible routes for a desired destination based on an input to a navigation system” and controlling a vehicle based on a route “selected from the plurality of possible routes” to manage the battery of the vehicle. The Examiner finds that Hettrich teaches these features. Final Act. 3–5 (citing, e.g., Hettrich ¶¶ 37, 85).

Appellant responds that “Hettrich discloses a method for determining whether, when, and how extensively to heat a battery so that the battery is pre-heated . . . so that the battery has a specific power output and performance level.” Appeal Br. 3. With respect to claim 1, Appellant contends that although “[t]he Examiner responds by arguing that paragraphs [0085] and [0105] of Hettrich disclose determining likely driving routes . . . , there is no disclosure or teaching in Hettrich of actually selecting one of these routes and controlling the vehicle based on the selected route to achieve a desired thermal management of a battery.” *Id.* at 4 (emphasis omitted). Appellant provides similar contentions for independent claims 12 and 16. *See id.* at 10 (“While Hettrich discloses that a destination can be used to determine likely driving routes, Hettrich does not disclose directing a vehicle to take a route, selected from among the plurality of possible routes, that avoids changes to a battery thermal state.”), 12 (“Hettrich only discloses predicting a most likely route that will be taken to a destination.”). Appellant has the better position.

Hettrich explains that “[o]ne strategy to increase low temperature battery performance includes pre-warming of the battery system before use of the battery” because “[a]s the battery temperature increases, the battery performance increases accordingly” and “[p]re-warming the battery increases the power available when the vehicle/battery is used.” Hettrich ¶ 5. Hettrich “sets forth methods and systems using novel inputs and combinations of inputs to predictively pre-warm a battery.” *Id.* ¶ 6. Although Hettrich references drive routes, those routes are simply used to predict future operation of a vehicle to facilitate pre-warming the battery.

The Examiner has not established that Hettrich “determin[es] a plurality of possible routes for a desired destination based on an input to a navigation system” and controlling a vehicle based on a route “selected from the plurality of possible routes” to manage the battery of the vehicle. Hettrich explains, for example, that “[d]estination information can . . . be a relevant input” because it “can be used to determine likely driving routes, which can determine the power level needed for driving (and thus the temperature to which the battery should be pre-heated).” Hettrich ¶ 85. Hettrich provides an example to illustrate its use of “routes” where “a user receives a text indicating that they will meet a friend for coffee 30 blocks across town in an hour” and based on that message, the “system . . . predict[s] that it is likely surface streets will be used, and pre-warming may be done to an extent that is sufficient for city driving but not highway driving.” *Id.* This destination information is not used to “determin[e] a plurality of possible routes for a desired destination” with one of those routes selected to control the vehicle as required by the claims. Rather than selecting a particular route to control the vehicle, Hettrich predicts the driving conditions the vehicle may experience and controls the vehicle to provide the battery pre-warming needed to accommodate those driving conditions.

For at least these reasons, we do not sustain the Examiner’s decision to reject claims 1, 12, and 16. The stated bases for the rejection of claims 2–11, 13–15, and 17–20 do not cure the deficiency in the rejection of claims 1, 12, and 16.

#### CONCLUSION

The Examiner’s rejections are reversed.

DECISION SUMMARY

In summary:

<b>Claims Rejected</b>	<b>35 U.S.C. §</b>	<b>Reference(s)/Basis</b>	<b>Affirmed</b>	<b>Reversed</b>
1-10, 12-14, 16-19	102(a)(1)	Hettrich		1-10, 12-14, 16-19
11, 15, 20	103	Hettrich, Dyer		11, 15, 20
<b>Overall Outcome</b>				1-20

REVERSED