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BROOKS KUSHMAN P.C./FGTL
1000 TOWN CENTER
22ND FLOOR
SOUTHFIELD, MI 48075-1238

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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 DOUGLAS JAMES MCEWAN,
CHRISTOPHER PAUL GLUGLA, MICHAEL DAMIAN CZEKALA, and
GARLAN J. HUBERTS
_____
_____

Appeal 2017-010530
Application 14/448,259
Technology Center 3600
_____

Before LINDA E. HORNER, ANNETTE R. REIMERS, and
SUSAN L. C. MITCHELL, *Administrative Patent Judges*.

REIMERS, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant[1] appeals under 35 U.S.C. § 134(a) from the Examiner's
decision to reject claims 1–3 and 12–20. Claims 4–11 have been withdrawn
from consideration. We have jurisdiction under 35 U.S.C. § 6(b).
We AFFIRM.

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[1] 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 Brief ("Appeal Br.") 1, filed Feb. 7, 2017.

CLAIMED SUBJECT MATTER

The claimed subject relates to systems "for vehicle data gathering and analysis." Spec. ¶ 1, Fig. 1. Claims 1 and 12 are independent.

Claim 1 is illustrative of the claimed subject matter and recites:

> 1. A system comprising:
>
> a processor configured to:
>
> > receive identification of a vehicle system-usage parameter to be tracked and a vehicle model in which to track the parameter;
> >
> > wirelessly transmit the parameter to vehicles of the identified model;
> >
> > receive usage data, of a system defined by the parameter, gathered following parameter receipt, from the wirelessly connected vehicles; and
> >
> > report the usage data responsive to a determination that the usage data indicates usage below a predefined threshold.

REJECTIONS

I. Claim 1–3 stand rejected under 35 U.S.C. § 101 as being directed to patent-ineligible subject matter.

II. Claims 1 and 2 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Tamir (US 2007/0027583 A1, published Feb. 1, 2007) and Cooper (US 2014/0136025 A1, published May 15, 2014).

III. Claim 3 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Tamir, Cooper, and Cox (US 2015/0228129 A1, published Aug. 13, 2015).

IV.   Claims 12–16 stand rejected under 35 U.S.C. § 103(a) as
       unpatentable over Tamir and Cox.

V.   Claim 17 stands rejected under 35 U.S.C. § 103(a) as
       unpatentable over Tamir, Cox, and Rill (US 2015/0254052 A1,
       published Sept. 10, 2015).

VI.   Claims 18 and 19 stand rejected under 35 U.S.C. § 103(a) as
       unpatentable over Tamir, Cox, and Rector (US 2011/0137520
       A1, published June 9, 2011).

VII. Claim 20 stands rejected under 35 U.S.C. § 103(a) as
       unpatentable over Tamir, Cox, Rector, and Ross
       (US 2006/0099944 A1, published May 11, 2006).

ANALYSIS

Rejection I – Patent-Ineligible Subject Matter

Claims 1–3

Appellant argues claims 1–3 as a group, and does not present
arguments for dependent claims 2 and 3 apart from the arguments presented
for the independent claim 1. *See* Appeal Br. 4–6. We select claim 1 as
representative, and claims 2 and 3 stand or fall with claim 1. *See* 37 C.F.R.
§ 41.37(c)(1)(iv).

An invention is patent-eligible if it claims a "new and useful process,
machine, manufacture, or composition of matter." 35 U.S.C. § 101.
However, the Supreme Court has long interpreted 35 U.S.C. § 101 to include
implicit exceptions: "[l]aws of nature, natural phenomena, and abstract
ideas" are not patentable. *E.g.*, *Alice Corp. v. CLS Bank Int'l*, 573 U.S. 208,
216 (2014) ("*Alice*").

In determining whether a claim falls within an excluded category, we are guided by the Supreme Court's two-step framework, described in *Mayo* and *Alice*. *Id.* at 217–18 (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 75–77 (2012) ("*Mayo*")). In accordance with that framework, we first determine what concept the claim is "directed to." *See Alice*, 573 U.S. at 219 ("On their face, the claims before us are drawn to the concept of intermediated settlement, *i.e.*, the use of a third party to mitigate settlement risk."); *see also Bilski v. Kappos*, 561 U.S. 593, 611 (2010) ("*Bilski*") ("Claims 1 and 4 in petitioners' application explain the basic concept of hedging, or protecting against risk.").

Concepts determined to be abstract ideas, and thus patent ineligible, include certain methods of organizing human activity, such as fundamental economic practices (*Alice*, 573 U.S. at 219–20; *Bilski*, 561 U.S. at 611); mathematical formulas (*Parker v. Flook*, 437 U.S. 584, 594–95 (1978) ("*Flook*")); and mental processes (*Gottschalk v. Benson*, 409 U.S. 63, 69 (1972) ("*Benson*")). Concepts determined to be patent eligible include physical and chemical processes, such as "molding rubber products" (*Diamond v. Diehr*, 450 U.S. 175, 191 (1981) ("*Diehr*")); "tanning, dyeing, making water-proof cloth, vulcanizing India rubber, smelting ores" (*id.* at 182 n.7 (quoting *Corning v. Burden*, 56 U.S. 252, 267–68 (1853))); and manufacturing flour (*Benson*, 409 U.S. at 69 (citing *Cochrane v. Deener*, 94 U.S. 780, 785 (1876))).

In *Diehr*, the claim at issue recited a mathematical formula, but the Supreme Court held that "[a] claim drawn to subject matter otherwise statutory does not become nonstatutory simply because it uses a mathematical formula." *Diehr*, 450 U.S. at 176; *see also id.* at 191 ("We

view respondents' claims as nothing more than a process for molding rubber products and not as an attempt to patent a mathematical formula."). Having said that, the Supreme Court also indicated that a claim "seeking patent protection for that formula in the abstract . . . is not accorded the protection of our patent laws, . . . and this principle cannot be circumvented by attempting to limit the use of the formula to a particular technological environment." *Id.* (citing *Benson* and *Flook*); *see*, *e.g.*, *id.* at 187 ("It is now commonplace that an *application* of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection.").

If the claim is "directed to" an abstract idea, we turn to the second step of the *Alice* and *Mayo* framework, where "we must examine the elements of the claim to determine whether it contains an 'inventive concept' sufficient to 'transform' the claimed abstract idea into a patent-eligible application." *Alice*, 573 U.S. at 221 (citation omitted). "A claim that recites an abstract idea must include 'additional features' to ensure 'that the [claim] is more than a drafting effort designed to monopolize the [abstract idea].'" *Id.* (quoting *Mayo*, 566 U.S. at 77). "[M]erely requir[ing] generic computer implementation[] fail[s] to transform that abstract idea into a patent-eligible invention." *Id.*

The PTO recently published revised guidance on the application of § 101. USPTO's 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (Jan. 7, 2019) ("Revised Guidance"). Under that guidance, we first look to whether the claim recites:

> (1) any judicial exceptions, including certain groupings of abstract
> ideas (i.e., mathematical concepts, certain methods of organizing

human activity such as a fundamental economic practice, or mental processes);[2] and

(2) additional elements that integrate the judicial exception into a practical application (*see* Manual for Patent Examining Procedure ("MPEP") §§ 2106.05(a)–(c), (e)–(h) (9th ed. 2018)).[3]

Only if a claim (1) recites a judicial exception and (2) does not integrate that exception into a practical application, do we then look to whether the claim:

(3) adds a specific limitation beyond the judicial exception that are not "well-understood, routine, conventional" in the field (*see* MPEP § 2106.05(d)); or

(4) simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception.[4]

See Revised Guidance, 84 Fed. Reg. at 54–56.

Analysis under the Revised Guidance

Preemption

Appellant contends that the claims do not preempt an abstract idea. *See* Appeal Br. 5–6 ("If 'reporting usage data' is the alleged abstract idea, then the claims obviously do not tie up this abstract idea such that others cannot practice it.").

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[2] Referred to as "*Revised Step 2A, Prong 1*" in the Revised Guidance (hereinafter "Step 2A(1)").
[3] Referred to as "*Revised Step 2A, Prong 2*" in the Revised Guidance (hereinafter "Step 2A(2)").
[4] Items (3) and (4) continue to be collectively referred to as "*Step 2B*" of the Supreme Court's two-step framework, described in *Mayo* and *Alice*.

Although preemption may denote patent ineligibility, its absence does

not demonstrate patent eligibility. *See Fair Warning IP*, *LLC v. Iatric Sys.*,

Inc., 839 F.3d 1089, 1098 (Fed. Cir. 2016). For claims covering a patent-

ineligible concept, preemption concerns "are fully addressed and made moot"

by an analysis under the *Mayo/Alice* framework. *Ariosa Diagnostics, Inc. v.*

Sequenom, *Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015). We conduct such an

analysis below.

Step 1 – Statutory Category

Claim 1 as a system claim recites a processor, which is one of the

enumerated categories of eligible subject matter in 35 U.S.C. § 101, i.e., a

machine. Therefore, the issue before us is whether the claims are directed to a

judicial exception without significantly more.

Step 2A(1) – Does the Claim Recite a Judicial Exception?

The Examiner determines that claim 1 "is directed to the concept of

reporting usage data, which is merely the automation of human activity and

an idea of itself, which is merely <u>an abstract idea</u>." Final Act. 2; Ans. 4.[5] In

particular, the Examiner determines that "[t]he process could be done by a

human analog (by hand or merely thinking)." Final Act. 2 (emphasis

omitted); Ans. 4 (emphasis omitted).

Appellant contends that "there is no law, case holding or statute that

provides or states that if a process could be done by hand, in some manner,

then the process is patent ineligible," that "[a]lgorithms that represent purely

mental processes may indeed be patent ineligible, but this <u>does not mean that</u>

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the concept is expanded to: 'if a human can do the claimed process, then the process is patent ineligible'" and that "since this is not purely a mental algorithm, requiring such steps as, for example, reporting usage data below a predetermined threshold . . . , the exception for mental algorithms does not apply." Appeal Br. 4.

As to Step 2A(1), which analyzes whether the claim recites a judicial exception, we determine that the claims recite mental processes that could be performed in the human mind, or by a human using a pen and paper. *See* Revised Guidance, 84 Fed. Reg. at 52 (identifying mental processes as an abstract idea subject matter grouping, wherein mental processes are described as "concepts performed in the human mind (including an observation, evaluation, judgment, opinion")); *id.*, n.14 (quoting *Intellectual Ventures 1 LLC v. Symantec Corp.*, 838 F.3d 1307, 1318 (Fed. Cir. 2016) ("[W]ith the exception of generic computer-implemented steps, there is nothing in the claims themselves that foreclose them from being performed by a human, mentally or with pen and paper.")).

Here, for example, claim 1 recites "receive identification of a vehicle system-usage parameter to be tracked and a vehicle model in which to track the parameter." The Specification describes examining actual vehicle usage compared to expected vehicle usage to determine, for example, if design changes or changes to demographic end-users is warranted. Spec. ¶ 34. The Specification describes that "utilization of vehicle features can be tracked to know what people want/use, and what people don't want or may just don't know about." *Id.* We understand this claim limitation to encompass a user selecting, through evaluation and judgment, which vehicle system-usage parameter for the vehicle model that the user wants to track and sending that

selection to the processor as an input. Such an act of selecting the usage parameter and model to be tracked can be performed by human judgment in the human mind and by using pen and paper to receive identification of the usage parameter and the vehicle model in which the usage parameter is to be tracked.

Claim 1 also recites "receive usage data, of a system defined by the parameter, gathered following parameter receipt, from the wirelessly connected vehicles." The Specification describes that "[t]he data gathered, for example, in the process shown in Figure 2 is received by the process 301." Spec. ¶ 35. Claim 1 does not recite that the claimed processor actually gathers the data. In fact, the Specification describes, with reference to Figure 2, a separate process running on a vehicle system that gathers the vehicle data. *Id.* ¶ 29. The claimed processor merely receives the data relevant to the selected usage parameter. This step could be performed through human observation, wherein a human mind using pen and paper can receive the gathered usage data from the vehicle of the identified model.

Claim 1 further recites "report the usage data responsive to a determination that the usage data indicates usage below a predefined threshold." Claim 1 does not recite that the claimed processor actually determines if the usage data falls below a predefined threshold. Rather, claim 1 recites that the claimed processor merely reports such usage data responsive to a determination, possibly performed elsewhere, that the usage data falls below the threshold. The function of reporting data can be performed by a human mind using pen and paper. Thus, these limitations, under the broadest reasonable interpretation, are steps that can be performed by a human mind, mentally or with pen and paper.

Accordingly, under Step 2A(1), we conclude that claim 1 recites mental processes, and thus, a judicial exception, i.e., an abstract idea.

Step 2A(2) – Is the Judicial Exception Integrated into a Practical Application?

Because the claims recite a patent-ineligible concept, we proceed to the "practical application" Step 2A, second prong, in which we determine whether the recited judicial exception is integrated into a practical application of that exception by: (a) identifying whether there are any additional elements recited in the claim beyond the judicial exception(s); and (b) evaluating those additional elements individually and in combination to determine whether they integrate the exception into a practical application. The Revised Guidance is "designed to more accurately and consistently identify claims that recite a practical application of a judicial exception [] and thus are not 'directed to' a judicial exception." Revised Guidance 53. In this case, claim 1 recites the additional limitation (b), "wirelessly transmit the parameter to vehicles of the identified model." The additional elements of claim 1 include, "a processor configured to" perform each of the recited steps, and the recited step of "wirelessly transmit[ting] the parameter to vehicles of the identified model."

Appellant contends that "the claims are not simply directed to any form of gathering and reporting data, but instead are directed to gathering specific data from specific vehicle models and reporting the data when usage of the specific parameter is below a specified threshold" and that "the claims actually *do* improve existing technology, by allowing an [original equipment manufacturer] OEM to gather vehicle data on a specific model of vehicles on the road, which data indicates systems that are being underutilized."

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Appeal Br. 4–5; *see also* Reply Br. 2[6] ("[T]he claim solves the problem of tracking a feature usage on a particular line of vehicles, by sending tracking parameters to the specific models in that line, and receiving usage data, which can then be used to determine and report if a certain feature is underused in those vehicles.").

As an initial matter, we note that several of the functions of claim 1 are not positively recited and thus are not required to be performed by the recited processor. For example, claim 1 does not positively recite that the processor gathers the usage data or determines whether the usage data is below a threshold. Rather, the claim only requires the processor to receive usage data that has been gathered and to report the data responsive to a determination that the usage data is below a threshold. *See* Appeal Br. 12 (Claims App.). Additionally, Appellant does not adequately explain how an original equipment manufacturer's (OEM's) gathering of vehicle data indicative of underutilized systems on a specific vehicle model provides improvements and enhancements to computer-related technology. *See* Appeal Br. 4–5; *see also* Reply Br. 2.

The Specification describes that "[c]onnected vehicle services provide a wide variety of customer benefits through wireless communication to and from the vehicle" (Spec. ¶ 2) and that "[i]n one illustrative embodiment, the system 1 uses the BLUETOOTH transceiver 15 to communicate 17 with a user's nomadic device 53 (e.g., cell phone, smart phone, PDA, *or any other device* having wireless remote network connectivity)" (*id.* ¶ 16) (emphasis added). The Specification further describes that in certain embodiments, the

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[6] Reply Brief ("Reply Br."), filed Aug. 7, 2017.

processes "may be executed by a computing system in communication with a vehicle computing system" and that "[s]uch a system *may include*, *but is not limited to*, a wireless device (e.g., *and without limitation*, a mobile phone) or a remote computing system (e.g., *and without limitation*, a server) connected through the wireless device." *Id.* ¶ 26 (emphases added).

The Specification also describes that "[t]he processor is . . . provided with *a number of different inputs* allowing the user to interface with the processor" (*id.* ¶ 14) (emphasis added), that "[o]utputs to the system can include, *but are not limited to*, a visual display 4 and a speaker 13 or stereo system output" (*id.* ¶ 15) (emphasis added), and that [*n*]*umerous examples* of data analysis and generated results *are considered to be within the scope of this disclosure*" (*id.* ¶ 66) (emphases added).

Upon review of Appellant's Specification, a preponderance of the evidence supports a determination that the "wireless transmission" of the identified parameter to vehicles of the identified model to be tracked, and the receipt of the tracked data is nothing more than generic computer functionality. Similarly, receiving identification of the parameter and model to be tracked is simply receiving inputs to the processor (generic computer functionality) and reporting the data is simply outputs from the processor (generic computer functionality). *See* MPEP 2106.05(f) ("As explained by the Supreme Court, in order to transform a judicial exception into a patent-eligible application, the additional element or combination of elements must do 'more than simply stat[e] the [judicial exception] while adding the words 'apply it'" (quoting *Alice*, 573 U.S. at 222–26) (alteration in original)).

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Although acknowledging that hardware and software can make non-abstract improvements to computer technology,[7] we determine that claim 1 as a whole (i.e., including wirelessly transmitting the parameter to the vehicle of the identified model) is not a practical application of the abstract idea identified in Step 2A(1) above.

Step 2B — "Inventive Concept" or "Significantly More"

The 2019 Guidance further explains that "[i]t is possible that a claim that does not 'integrate' a recited judicial exception into a practical application is nonetheless patent eligible," for example, because "the claim may recite additional elements that render the claim patent eligible even though a judicial exception is recited in a separate claim element." *See* Revised Guidance, 84 Fed. Reg. at 56. In other words, a claim may still be patent eligible if "the additional elements recited in the claims provided 'significantly more' than the recited judicial exception (*e.g.*, because the additional elements were unconventional in combination)." *Id.*

The Examiner determines that claim 1 "do[es] not include additional elements that are sufficient to amount to significantly more than the judicial exception because they are merely an abstract idea with additional generic computer elements." Final Act. 3; *see also* Ans. 5. In particular, the Examiner determines that the processor of the subject invention "is generically recited and can merely be a general purpose computer that performs basic computer functions of detecting, generating, and comparing data, which are all well-understood, routine and conventional" (Ans. 5) and

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[7] *See* Revised Guidance, 84 Fed. Reg. at 52, n.11 (citing *Finjan Inc. v. Blue Coat Systems, Inc.*, 879 F.3d 1299 (Fed. Cir. 2018) and *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327 (Fed. Cir. 2016)).

that "[t]he processor is generically recited and is merely used for receiving, transmitting, and reporting in a well-understood, routine, and conventional way" (Final Act. 3).

The Specification describes that:

> [T]he processor is connected to both non-persistent 5 and persistent storage 7. In this illustrative embodiment, the non-persistent storage is random access memory (RAM) and the persistent storage is a hard disk drive (HDD) or flash memory. In general, persistent (non-transitory) memory *can include all forms* of memory that maintain data when a computer or other device is powered down. These *include, but are not limited to*, HDDs, CDs, DVDs, magnetic tapes, solid state drives, portable USB drives and any other suitable form of persistent memory.

Spec. ¶ 13 (emphases added).

The Specification further describes that "[i]n each of the illustrative embodiments discussed herein, an exemplary, *non-limiting example of a process* performable by a computing system is shown" (Spec. ¶ 27) (emphasis added), that "[a]ll processes need not be performed in their entirety, and are understood *to be examples of* types of processes that *may be performed* to achieve elements of the invention" (*id.*) (emphases added), and that "[t]his illustrative *non-limiting process* focuses on data gathering and analysis related to vehicle and vehicle feature use" (*id.* ¶ 35) (emphasis added).

Upon review of Appellant's Specification, a preponderance of the evidence supports a determination that the Specification describes the processor performs conventional functions of receiving, transmitting, and reporting data. As such, we agree with the Examiner that claim 1 does not provide meaningful limitations to transform the abstract idea into a patent

eligible application of the abstract idea such that the claims amount to significantly more than the abstract idea itself. *See* Ans. 4–6; *see also* Final Act. 2–4.

Therefore, based upon the findings and legal conclusions above, on this record and in consideration of the Revised Guidance, we are not persuaded that claim 1 is directed to patent-eligible subject matter, such that we sustain the Examiner's rejection of claims 1–3 as being directed to patent-ineligible subject matter.

Rejection II – Obviousness over Tamir and Cooper

Claims 1 and 2

The Examiner finds that Tamir discloses the system of claim 1 substantially as claimed except "Tamir does not explicitly mention receive usage data, of a system defined by the parameter, gathered following parameter receipt, from the wirelessly connected vehicles; and report the usage data responsive to a determination that the usage data indicates usage below a predefined threshold." Final Act. 8–9. The Examiner looks to the teachings of Cooper for these limitations. Final Act. 9–10. In particular, the Examiner finds that the "monitored characteristics" disclosed in Cooper constitute the recited "usage data." *See* Final Act. 10; *see also* Ans. 9 ("Cooper will report the monitored characteristics (usage data) once it drops below a threshold (an anomaly is indicated)" (citing Cooper ¶ 179)).

Appellant contends that "[n]othing in Cooper teaches that 'a monitored characteristic' has anything to do with 'usage data, of a system defined by the parameter.'" Appeal Br. 8; *see also* Reply Br. 3 ("Reporting characteristics of a vehicle, such as engine temperature, has literally nothing

to do with 'usage data of a system defined by a parameter' and reporting

'when that usage falls below a threshold.'").

Appellant has the better position here. Cooper discloses that:

> With respect to the vehicles **1908**, one or more on-board sensors **2102** may be disposed on-board the vehicles **1908** to detect anomalies related to the vehicles **1908** (e.g., mechanical failure or characteristics of operation that indicate an impending mechanical failure). The on-board sensors **2102** can monitor operational characteristics of the vehicle **1908** to determine if an anomaly related to the vehicle **1908** occurs.

Cooper ¶ 178, Fig. 21. Cooper also discloses that "the sensors **2102** may report the characteristics to the control system **1918** when the characteristics indicate an anomaly (e.g., exceed or fall below a threshold)." *Id.* ¶ 179.

Appellant's Specification differentiates between what may constitute a vehicle "parameter" and what may constitute "usage data" related to a "vehicle system-usage parameter." *See* Spec. ¶¶ 31 (discussing various vehicle parameters), 36 (discussing examples of vehicle use parameters), 37 (discussing examples of vehicle feature use parameters). For example, the Specification describes "traffic data" as a "vehicle system parameter" to be tracked and further describes "types of driving (highway, city, offroad, etc.))" as "usage data" to be gathered based on that system defined parameter. *See* Spec. ¶¶ 31, 36.

A comparison between Appellant's disclosure and Cooper's disclosure would appear to equate Cooper's "monitored characteristics," which indicate "mechanical failure or characteristics of operation that indicate an impending mechanical failure," with Appellant's vehicle "parameters," which are indicative of "relevant data that may be useful in identifying vehicle problems." *See* Spec. ¶ 31. In this case, the Examiner

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fails to provide sufficient evidence or technical reasoning to establish that Cooper's "monitored characteristics" constitute the claimed "usage data" related to a vehicle system-usage parameter. Final Act. 9–10; *see also* Ans. 9.

Accordingly, for the foregoing reasons, we do not sustain the Examiner's rejection of claims 1 and 2 as unpatentable over Tamir and Cooper.

Rejection III – Obviousness over Tamir, Cooper, and Cox

Claim 3

The Examiner's rejection of claim 3 as unpatentable over Tamir, Cooper, and Cox is based on the same unsupported findings and conclusions in Cooper discussed above with respect to independent claim 1. *See* Final Act. 11–12. The Examiner does not rely on the teachings of Cox to remedy the deficiencies of Cooper. Accordingly, for reasons similar to those discussed above for claim 1, we do not sustain the Examiner's rejection of claim 3 as unpatentable over Tamir, Cooper, and Cox.

Rejection IV – Obviousness over Tamir and Cox

Claims 12–16

Appellant does not offer arguments in favor of dependent claims 13–16 separate from those presented for independent claim 12. *See* Appeal Br. 10. We select claim 12 as the representative claim, and claims 13–16 stand or fall with claim 12. 37 C.F.R. § 41.37(c)(1)(iv).

The Examiner finds that Tamir discloses the system of claim 12 substantially as claimed, including "determin[ing] the user-demographic for vehicle occupants when the vehicle system is used." Final Act. 12–13. The Examiner finds that Tamir fails to disclose wirelessly receiving, from a

remote system, a system-parameter and a user-demographic for tracking. *Id.*
at 13. The Examiner looks to the teachings of Cox for this limitation. In
particular, the Examiner finds that Cox discloses wirelessly receiving, from
a remote system, a "user-demographic for tracking." *Id.* at 13–14.

Appellant contends Tamir fails to disclose "determine the user-
demographic for vehicle occupants when the vehicle system is used."
Appeal Br. 9. In particular, Appellant contends that:

> Detecting a number of passengers is: 1) not demographic
> tracking; 2) not taught to be done when a particular system is
> used (the teaching is that passenger count is detected in general,
> not detected when a system is used); and 3) not a defined
> demographic parameter wirelessly received by the vehicle from
> a remote system.

Id.

As an initial matter, dependent claim 16 recites "[t]he system of
claim 12, wherein the user-demographic includes *number of occupants*."
Appeal Br. 14 (Claims App.) (emphasis added). Thus, Appellant fails to
apprise us as to how the Examiner's reliance on Tamir's disclosure of
"number of passengers" as constituting the claimed "user-demographic" for
tracking is in error. *See* Appeal Br. 9; *see also* Final Act. 12–13.

Tamir discloses that "[i]n some embodiments of the invention, the
warning thresholds are adjusted responsive to the number of passengers in
vehicle **150**. The number of passengers may be determined *according to
sensors under the passenger seats* [and] based on acceleration readings."
Tamir ¶ 184; *see also* Final Act. 12–13. Tamir also discloses that "[i]n one
embodiment, the warning system warns the driver when dangerous behavior
is identified, such as driving much faster or much slower than other vehicles

currently on the road." Tamir ¶ 5 (emphasis added). Tamir further

discloses that "[o]utput unit **118** optionally displays information on the road

segment on which vehicle **150** is *currently driving*, for example the speed

limit, the average vehicle speed and/or warnings on construction" and that

"[a]lternatively or additionally, to controlling vehicle **150** when a dangerous

situation is anticipated, safety measures are taken, so as to *protect the*

passengers, such as tightening seat belts, doubling braking system power

and/or cocking the airbag system." Tamir ¶¶ 203 (emphasis added), 207

(emphasis added).

Upon review of the above cited disclosure from Tamir, we disagree

with Appellant's contentions that detecting a number of passengers in Tamir

is "not demographic tracking" and is "not taught to be done when a

particular system is used." *See* Appeal Br. 9. Thus, Appellant has not

apprised us of error in the Examiner's finding that Tamir discloses

"determine the user-demographic for vehicle occupants when the vehicle

system is used," as recited in claim 12. Final Act. 12–13; *see also* Appeal

Br. 14 (Claims App.). As to Appellant's contention that Tamir fails to

disclose a "demographic parameter wirelessly received by the vehicle from a

remote system" (Appeal Br. 9), the Examiner relies on the teachings of Cox,

not Tamir, for this limitation. *See* Final Act. 13–14.

Appellant contends that although paragraph 57 of Cox discloses that

"a user profile can include user demographic information," "the mere fact

that a user profile includes demographic information does not mean that:

a) the demographic information is wirelessly transmitted to the vehicle; or,

more importantly, b) that a demographic "for tracking" is wirelessly

transmitted to the vehicle." Appeal Br. 10.

Cox discloses that "[a]s an alternative or variation, the usage models **435** can reflect a driver type (aggressive or careful etc.) [or] driver demographic (e.g., young, over 40, male/female etc.)" and that "[t]he usage store **435** can be maintained *to track use of a given vehicle* for each user model (i.e., driver) associated with that vehicle." Cox ¶¶ 86, 87 (emphasis added); *see also* Final Act. 14. Cox also discloses that "[t]he wireless communication device **250** can enable wireless transmission and *exchange of data* between the vehicle monitor device **20** and one or more network services **201**" and that "[i]n one implementation, the wireless communication device **250** can transmit and *receive data* using a cellular communication medium. In variation, the wireless communication device **250** can transmit and *receive data* using a local communication medium." Cox ¶¶ 39 (emphasis added), 40 (emphases added), Figs. 1, 2; *see also* Final Act. 13–14.

Upon review of the above cited disclosure from Cox and under the broadest reasonable interpretation, a preponderance of the evidence supports the Examiner's finding that Cox discloses a demographic "for tracking" that is wirelessly transmitted to the vehicle. *See* Final Act. 13–14. Appellant does not provide persuasive evidence or argument to the contrary. Appeal Br. 10.

In summary, and based on the record presented, we are not persuaded the Examiner erred in rejecting independent claim 12 as unpatentable over Tamir and Cox. Accordingly, we sustain the Examiner's rejection of claim 12. We further sustain the rejection of claims 13–16, which fall with claim 12.

Rejections V through VII – Obviousness over Tamir, Cox, and either Rill or Rector or Obviousness over Tamir, Cox, Rector, and Ross

Claims 17–20

Appellant contends that the teachings of Rill, Rector, or Ross do not "cure the deficiencies of Tamir and Cox." *See* Appeal Br. 10–11. As we find no deficiencies in the Examiner's rejection of claim 12 as unpatentable over Tamir and Cox for the reasons discussed above, we likewise sustain the Examiner's obviousness rejections of claims 17–20.

DECISION

We AFFIRM the decision of the Examiner to reject claims 1–3 as being directed to patent-ineligible subject matter.

We REVERSE the decision of the Examiner to reject claims 1 and 2 as unpatentable over Tamir and Cooper.

We REVERSE the decision of the Examiner to reject claim 3 as unpatentable over Tamir, Cooper, and Cox.

We AFFIRM the decision of the Examiner to reject claims 12–16 as unpatentable over Tamir and Cox.

We AFFIRM the decision of the Examiner to reject claim 17 as unpatentable over Tamir, Cox, and Rill.

We AFFIRM the decision of the Examiner to reject claims 18 and 19 as unpatentable over Tamir, Cox, and Rector.

We AFFIRM the decision of the Examiner to reject claim 20 as unpatentable over Tamir, Cox, Rector, and Ross.

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).

<u>AFFIRMED</u>