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MacMillan, Sobanski & Todd, LLC - GM			SWARTZ, STEPHEN S	
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The time period for reply, if any, is set in the attached communication.

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DETAILED ACTION

1. The present application is being examined under the pre-AIA first to invent provisions.

2. This action is in response to the Patent Trial and Appeal Board Decision issued 15 December 2015 that is in response to the claims filed 14 May 2012. Claims 1-22 are pending and have been examined.

3. A Patent Trial and Appeal Board decision was issued 15 December 2015, reversing examiner's action on the claims. In response to this decision, prosecution is reopened. The Technology Center (TC) Director has authorized the reopening of prosecution under 37 CFR 1.198 for the purpose of entering a new rejection, as indicated by signing below. See MPEP 1002.02(c) and MPEP 1214.04. New grounds of rejection set forth below.

Claim Rejections - 35 USC § 101

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims (1-16), and (17-22) are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter because the claim(s) as a whole, considering all claim elements both individually and in combination, do not amount to significantly more

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than an abstract idea. The claim(s) is/are directed to the abstract idea of abstract idea of detecting anomalies with regard to service repairs based on correlating, storing, assessing, comparing and recommending repairs based on data. The claimed invention is directed to a judicial exception (i.e., a law of nature, a natural phenomenon, or an abstract idea) without significantly more than the judicial exception itself. Claim(s) (1-16), and (17-22) is/are directed to an abstract idea without significantly more.

6. Regarding Step 1 of the Subject Matter Eligibility Test for Products and Processes (from the December 16, 2014 §101 Examination Guidelines), claims (1-16) are directed to a method, and claims (17-22) are directed to a system.

7. Regarding Step 2A, an abstract idea is deemed to be present in the claims, namely the abstract idea of detecting anomalies with regard to service repairs based on providing, collecting, applying, comparing, identifying, generating, analyzing, and alerting based on data for claims 1 and storing, and recommending for claims 17-22 which are viewed as the collecting and comparing of known information **an idea of itself** (An idea standing alone such as an uninstanced concept, plan or scheme, as well as a mental process(thinking) that “can be performed in the human mind, or by a human using a pen and paper”), and steps additionally claims (1-16) and claims (17-22) recite the correlation of failure modes using a matrix which are seen as the use of **mathematical relationships/formulas** (mathematical concepts such as mathematical algorithms, mathematical relationships, mathematical formulas, and calculations). Additionally, the abstract idea in the invention fits the fact pattern in cases the courts determined

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to be abstract, such as using categories to organize, store and transmit information (as outlined in *Cyberfone Sys. v. CNN Interactive Grp.*, 558 Fed. Appx. 988 (Fed. Cir. 2014)), or comparing new and stored information and using rules to identify options (as outlined in *SmartGene, Inc. v. Advanced Biological Laboratories, SA*, 555 Fed. Appx. 950 (Fed. Cir. 2014) and “data gathering” - collecting data, recognizing certain data within the collected data set, and storing that recognized data in a memory (as outlined in *Content Extraction & Transmission v. Wells Fargo Bank, N.A.*, 776 F.3d 1343 (Fed. Cir. 2014)). These determinations are supported by the recited limitations of independent claims 1 and;

- providing a failure mode-symptom ...;
- collecting diagnostic trouble codes...;
- providing the diagnostic trouble codes...;
- applying diagnostic assessment...;
- comparing the recommended repair...;
- identify a mismatch...;
- generating reports...;
- analyzing the reports...;
- alerting service centers...;

claim 17;

- a failure mode-symptom correlation matrix module that correlates failure modes to symptoms...;

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- a memory for storing diagnostic trouble codes...;
- a processing unit correlating the diagnostic trouble codes...;
- wherein the recommended repair compared with actual repair used...;

8. Regarding Step 2B, the additional elements of claims (1-16) which recites a module, processor, and equipment while claims (17-22) recites processing unit, memory, equipment, and a module which are further identified in the specification as being identified as a communication bus, memory, processor, processor memory, a diagnostic reasoner, a vehicle processor memory, and onboard processor. These additional elements are not sufficient to amount to significantly more than the judicial exception because they do not recite, for example: an improvement to another technology or technical field; improvements to the functioning of the computer itself; applying the judicial exception with, or by use of, a particular machine; effecting a transformation or reduction of a particular article to a different state or thing; adding a specific limitation other than what is well-understood, routine and conventional in the field, or adding unconventional steps that confine the claim to a particular useful application; or other meaningful limitations beyond generally linking the use of the judicial exception to a particular technological environment (Note: this is not an exhaustive list). The determination that the elements do not amount to significantly more than the abstract idea is supported by the finding that the specification and the current claims are silent regarding any improvements to the functioning of the computer itself or the need for a particular machine on which to apply the abstract idea. No particular machines are explicitly involved in accomplishing the abstract idea as can be seen Figure 1 and par. [0016]: “The computer systems may include appropriate input

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devices, output devices, mass storage media, processors, memory, or other components for receiving, processing, storing, and communicating information according to operation of the method and system. As used in this document, the term "computer" is intended to encompass a personal computer, workstation, network computer, wireless data port, wireless telephone, personal digital assistant, one or more microprocessors within these or other devices, or any other suitable processing device." As can be seen in the cited portion of the specification the invention uses a generic machine to perform the steps of the invention. The claims do not include additional elements that are sufficient to amount to significantly more than the judicial exception because the additional elements when considered both individually and as a combination do not amount to significantly more than the abstract idea. Generic computer features such as a processing devices, processing systems performing generic computer functions, and tangible computer readable storage medium do not amount to significantly more than the abstract idea. The type of information being manipulated does not impose meaningful limitations or render the idea less abstract. Looking at the elements as a combination does not add anything more than the elements analyzed individually. Therefore, the claim does not amount to significantly more than the abstract idea itself. The claim is not patent eligible. All limitations of the independent claims were evaluated but did not yield anything that could be deemed as significantly more. No other claims add limitations that could be deemed as significantly more. Applicant's inventive concept seems to depend completely on the abstract idea (judicial exception) itself. It is when the claims are wholly directed to the abstract idea without anything "significantly more" in the claims that the claims are deemed to preempt or monopolize the exception (i.e., the abstract idea). As stated in Section I.B of the December 16, 2014 §101 Examination Guidelines, "[t]o be patent-eligible, a

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claim that is directed to a judicial exception must include additional features to ensure that the claim describes a process or product that applies the exception in a meaningful way, such that it is more than a drafting effort designed to monopolize the exception."

9. It is noted that if the broadest reasonable interpretation of the claims are limited to a computer implementation, adding a generic computer to perform generic functions that are well-understood, routine and conventional, such as gathering data, comparing data, combining data, and outputting a result would not transform the claim into eligible subject matter. Generic computer-implementation of the method is not a meaningful limitation that alone can amount to significantly more than the exception. Moreover, when viewed as a whole with such additional elements considered as an ordered combination, the claim modified by adding a generic computer would be nothing more than a purely conventional computerized implementation of applicant's collection and manipulation of data and would not provide significantly more than the judicial exception itself.

10. There are no additional elements in the claims for providing significantly more than the abstract idea, therefore all limitations are deemed to be directed to the abstract idea of generating a list of abstract idea of detecting anomalies with regard to service repairs based on correlating, storing, assessing, comparing and recommending repairs based on data. Therefore, claims (1-16), and (17-22)) are directed to non-statutory subject matter.

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Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Williams et al. (U.S. Patent 7,379,846 B1) discloses a system and method for automated problem diagnosis.
- b. Fera et al. (U.S. Patent 6,338,152 B1) discloses a method and system for remotely managing communication of data used for predicting malfunctions in a plurality of machines.
- c. KARGUPTA (U.S. Patent Publication 2011/0258044 A1) discloses an onboard vehicle data mining, social, network, and pattern-based advertisement.
- d. Wittliff, III et al. (U.S. Patent 9,081,883 B2) discloses dynamic decision sequencing method and apparatus for optimizing a diagnostic test plan.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to STEPHEN S. SWARTZ whose telephone number is (571)270-7789. The examiner can normally be reached on Monday through Friday 10:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Beth Boswell can be reached on (571) 272-6737. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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/SSS/

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