

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT AND TRIAL APPEAL BOARD

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ORACLE CORPORATION

Petitioner

v.

Patent of CLOUDING IP, LLC

Patent Owner

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Case IPR 2013-00095 (JL)

Patent 5,944,839

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**PATENT OWNER PRELIMINARY RESPONSE TO  
PETITION FOR *INTER PARTES* REVIEW OF  
U.S. PATENT NO. 5,944,839  
UNDER 35 USC §§ 311-319 AND 37 CFR §42.100 ET SEQ.**

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Pursuant to 37 C.F.R. § 42.107(a) Patent Owner, Clouding IP, LLC, submits the following preliminary response to the petition, setting forth reasons why no *inter partes* review should be instituted under 35 U.S.C. § 314.

## **1. Introduction.**

The Board should not institute *inter partes* review because Petitioner, Oracle Corp., has not met the high standard<sup>1</sup> required by Patent Office

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<sup>1</sup> The “reasonable likelihood” standard was intended by Congress to be a substantially higher barrier to patent validity challenged than the former “substantial new question of patentability” test used for *inter partes* reexaminations. See H.R. Rep. No. 112-98 (part 1) at 47 (2011) (“The threshold for initiating an *inter partes* review is elevated from ‘significant new question of patentability’ – a standard that currently allows 95% of all requests to be granted – to a standard requiring petitioners to present information showing that their challenge has a reasonable likelihood of success.”). Thus, the new standard makes *inter partes* review available only in exceptional cases where serious doubts about the patent’s validity are raised and a *prima facie* case has been established. See 157 Cong. Rec. S1375 (Mar. 8, 2011) (statement of Sen. Kyl (D-Ariz)).

regulations to demonstrate a reasonable likelihood that at least one of the claims challenged in the petition is unpatentable. 37 C.F.R. § 42.108(c).

## **2. Overview of U.S. Patent 5,944,839.**

U.S. Patent 5,944,839 (the “839 Patent”) (Oracle Ex. 1001) describes techniques for enabling automated maintenance of a computer system. *Ex. 1001* at Abstract. Briefly, in response to problems detected by sensors deployed within the computer system, an artificial intelligence (AI) engine is activated. *Id.* at col. 2, ll. 2-3; col. 4, ll. 43-44. The AI engine uses information provided by the sensors to diagnose the likely cause of the problem. If, during this analysis, the AI engine requires further information in order to make a diagnosis, it activates selected ones of a plurality of sensors to gather the additional information. *Id.* at col. 2, ll. 4-11; col. 4, ll. 48-51. The problem diagnosis is then made using a case base of knowledge to determine a likely solution to the problem from the gathered information. *Id.* at col. 2, ll. 4-11; col. 4, ll. 46-54. When a likely solution cannot be determined, the state of the computer system is saved in the knowledge base. *Id.* at col. 5, ll. 2-6.

### **3. Claim Terms Requiring Construction.**

Consistent with the statute and legislative history of the America Invents Act, when considering whether to institute a patent trial the Board has indicated that it will interpret the claims of a *challenged* patent using a “broadest reasonable construction” approach. Office Patent Trial Practice Guide, 77 Fed. Reg. 48756, 48766 (Aug. 14, 2012). In applying such a standard, it is important to recognize that the broadest reasonable construction of claim language is not one that permits any reading thereof. Instead, it is one that must be made “in light of the specification as it would be interpreted by one of ordinary skill in the art.” *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004). Further, unless the patentee has clearly demonstrated an intention to stray, there is a “heavy presumption” that a claim term carries its ordinary and customary meaning. *CCS Fitness, Inc. v. Brunswick Corp.*, 288 F.3d 1359, 1366 (Fed. Cir. 2002). Of course, patent claims must “conform to the invention as set forth in the remainder of the specification and the terms and phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description.” 37 C.F.R. § 1.75(d)(1).

**A. Sensor.**

The '839 patent explains that a “sensor” is a diagnostic and repair tool executing on a computer system that monitors operations of a computer system and may also activate the AI engine. *Ex. 1001* at col. 1, ll. 59-64. Sensors are also described as “software programs that gather information from the computer system” and perform “perform certain repair operations related to the type of data it senses.” *Id.* at col. 3, ll. 16-32. A broadest reasonable construction of the term “sensor” is thus, “a software program that performs at least one of gathering information from a computer system, and performing repair operations on a computer system”.

**B. Artificial Intelligence (AI) Engine.**

Under a broadest reasonable construction the term “AI engine” means a software program for processing information in a database according to case-based scenarios. *Id.* at col. 4, ll. 12-20.



**C. Summary of Proposed Claim Constructions.**

For the convenience of the Board, below is presented a summary of the Patent Owner's proposed claim constructions.

Claims in which Term <u>Appears</u>	Claim Term for <u>Construction</u>	<u>Proposed Construction</u>
1, 2, 6, 8, 14, 15, 17	"sensor"	a software program that performs at least one of gathering information from a computer system, and performing repair operations on a computer system
55	"AI engine"	a software program for processing information in a database according to case-based scenarios

#### **4. Argument.**

##### **A. The Petition Fails to Establish a Reasonable Likelihood that at Least One of Claims 1, 2, 6, 8, 14, 15, and 17 is Obvious in View of *Gürer*.**

All words in a claim must be considered in judging the patentability of that claim against the prior art.” *In re Wilson*, 424 F.2d 1382, 1385 (CCPA 1970). Furthermore, the rationale to support a conclusion that the claim would have been obvious is that all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination yielded nothing more than predictable results to one of ordinary skill in the art. *KSR International Co. v. Teleflex Inc.*, 550 U.S. 398, 419 (2007); *Sakraida v. AG Pro, Inc.*, 425 U.S. 273, 282 (1976); *Anderson’s-Black Rock, Inc. v. Pavement Salvage Co.*, 396 U.S. 57, 62-63 (1969); *Great Atlantic & P. Tea Co. v. Supermarket Equipment Corp.*, 340 U.S. 147, 152 (1950). In the present case, *Gürer*, “An Artificial Intelligence Approach to Network Fault Management” (Oracle Ex. 1003), fails to teach or suggest an AI engine,

sav[ing] [data gathered by a sensor activated by the AI engine when a knowledge database lacks data necessary to determine a likely solution to a computer problem] in the knowledge database as a new case,

as recited in claim 1, therefore claim 1 and its dependent claims are patentable over *Gürer*. See *Ex. 1001*, claim 1 at col. 5, ll. 29-38.

*Gürer* describes an AI-based solution for fault management within networks. *Ex. 1003* at p. 1. The system is configured to “(1) collect alarms, (2) maintain customer satisfaction through immediate action, (3) filter and correlate the alarms, (4) diagnose faults through analysis and testing, (5) determine a plan for correction, display correction options to users, and implement the correction plan, (6) verify the fault is eliminated, (7) record data and determine the effectiveness of the current fault management function.” *Id.* Case-based reasoning forms part of the fault identification process, *id.* at p. 6, and where a case library includes past cases that resemble a currently detected fault condition, solutions in line with the past cases are attempted. *Id.* at p. 8. When information regarding new cases requiring new solutions is added to the case library, however, a user enters that information manually through a graphical user interface. *Id.* at p. 6.

In contrast to the presently claimed invention then, the system proposed by *Gürer* relies on manually entered information regarding new cases when the case library lacks the information necessary to determine a likely solution to a computer problem. The Petition fails to explain why a system that requires

such manual data entry is equivalent to or suggests one in which an AI engine saves data gathered by a sensor activated by the AI engine when a knowledge database lacks data necessary to determine a likely solution to a computer problem in the knowledge database as a new case. *See* Petition at p. 22-23 (citing *Gürer* but failing to explain how the manual data entry teaches or suggests the claim element). Nor does the declaration offered by Professor Mowry address this deficiency. In fact, the declaration is completely silent on this point.

*A prima facie* case of obviousness requires, at a minimum, that the Petitioner articulate the reasons why the claimed invention would be obvious to the person of ordinary skill in the art. *KSR, supra*, 550 U.S. at 419. Mere conclusory statements without any supporting rationale are wholly insufficient for this purpose. *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006). Here, petitioner has failed to meet this burden because no explanation is offered as to why a person of ordinary skill in the art would equate *Gürer's* use of manual updates to a case library with the presently claimed AI engine saving newly gathered data as a new case. Hence, claim 1 should be deemed patentable over *Gürer*.

If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071 (Fed. Cir. 1988). Hence, claim 2, which depends from claim 1, should be deemed patentable over *Gürer* for at least all of the same reasons as claim 1.

Similar to claim 1, independent claim 6 recites, “when a likely solution cannot be determined, saving a state of the computer system.” *Ex. 1001*, claim 6 at col. 6, ll. 3-4. Independent claim 15 recites, “when a likely solution to the computer problem does not exist, saving the sensed information as a new case of the plurality of cases.” *Id.*, claim 15 at col. 6, ll. 54-56. As demonstrated above, when the case library cannot supply the necessary solution, *Gürer* relies on new case information that is added by a user manually. Professor Mowry makes no attempt to explain how *Gürer* teaches or suggests saving a state of a computer system when a solution to a computer problem cannot be found (instead stating only that because claim 6 is somehow “broader” than claim 1, it too must be obvious in view of *Gürer*, *Ex. 1007* at ¶ 43),<sup>2</sup> or where *Gürer*

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<sup>2</sup> Insofar as Petitioner seeks to rely on *Gürer* specifying that, “the whole problem solving episode should be analyzed. The value of the tests (i.e., useful, not useful), the steps taken, any circuitous paths or dead-ends taken, and the success of the analysis should be stored into a new case.”, *Ex. 1003* at p. 8, as

teaches or suggests saving the sensed information as a new case (instead stating only that his discussion of claim 1 applies to claim 15, *Ex. 1007* at ¶ 47). Thus, as was the case for claim 1, Petitioner has failed to make out a prima facie case of obviousness as to claims 6 and 15, and these claims should be deemed patentable over *Gürer*. Claim 8 and 14 depend from claim 6 and claim 17 depends from claim 15. These dependent claims should be deemed patentable over *Gürer* for at least the same reasons are their respective independent claims.

For at least the foregoing reasons, Petitioner has failed to demonstrate a reasonable likelihood that it will prevail as to the challenged claims and this proposed ground for institution of *inter partes* review proceedings should be denied.

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teaching this element of claim 6, it is important to note that *Gürer* advocates saving all data related to a problem-solving episode, whether in cases of a likely solution being determined or not. *Id.* In contrast, claim 6 requires saving a state of the computer system *when a likely solution cannot be determined*. *Gürer* does not teach such a contextual requirement.

**B. The Petition Fails to Establish a Reasonable Likelihood that at Least One of Claims 1, 2, 6, 8, 14, 15, and 17 is Obvious in View of Allen ‘218.**

Allen, U.S. patent 5,586,218 (*Allen* ‘218) (Oracle Ex. 1004), describes a software agent that performs autonomous learning in a real-world environment. *Ex. 1004*, Abstract. The software agent employs a case database that “comprises a limited number of stored cases” coupled to a sensor. *Id.* and col. 5, ll.49-51. The case database “maintains a set of cases which allow the software agent to distinguish variant problem scenarios and to act autonomously and intelligently in those variant problem scenarios.” *Id.* at col. 5, ll. 49-60.

Beginning first with claim 6, *Allen* ‘218 fails to teach or suggest “saving a state of a computer system” when a likely solution to a problem in the computer system cannot be determined by an AI engine after using a sensor to gather information about the computer system. *Ex. 1001*, claim 6 at col. 5, l. 63 – col. 6, l. 4. The Petition cites a rather ambiguous passage in *Allen* ‘218 regarding a so-called “genetic technique” for producing, evaluating and selecting cases, with new cases being produced by inspection of scenarios from an environment, Petition at p. 43, citing *Ex. 1004* at col. 2, ll. 63-67, as somehow relating to this feature of claim 6. However, the Petition offers no explanation whatsoever as to the relevance this passage and Professor Mowry’s

declaration is utterly silent on the question. A bare allegation of this nature falls woefully short of any articulated reasons why the claimed invention would be obvious to the person of ordinary skill in the art. *KSR, supra*, 550 U.S. at 419. It also fails to demonstrate that this is an exceptional cases where serious doubts about the patent's validity are raised. *See* 157 Cong. Rec. S1375, *supra*. How, for example, does *Allen '218*'s "genetic technique" teach or suggest saving the state of a system? The cited passage itself offers no answer to this question and Petitioner has failed to provide any further explanation. In short, the Petition fails to make out a *prima facie* case of obviousness as to claim 6 and so claim 6 and its dependent claims should be deemed patentable over *Allen '218*.

The same analysis can be applied to Petitioner's attempt to demonstrate the obviousness of claims 1 and 15. The same passage from *Allen '218* is cited by Petitioner as somehow teaching "wherein when the knowledge database does not describe a likely solution to the computer problem, the AI engine saves the gathered data in the knowledge database as a new case", as recited in claim 1. Petition at p. 39. The Petition does not explain why this same, rather opaque, statement in *Allen '218* can both teach saving the state of a computer system, as required by claim 6, and also teach an AI engine saving data gathered by sensors activated by that AI engine (when insufficient information to determine a likely



solution to a computer problem exists in a knowledge database) to the knowledge database as a new case. Nothing from Professor Mowry's declaration is offered in support of this conclusion; hence, a reader is left wondering just how this passage from the cited reference is to be read. The failure of Petitioner to provide any articulated reasons for the conclusion of obviousness is therefore fatal to its cause and the Board should refuse to institute *inter partes* review on this basis. *See KSR, supra*, 550 U.S. at 419.

The case proffered against claim 15 may be analyzed in a similar fashion inasmuch as Petitioner merely refers to its arguments advanced with respect to claim 1 when considering a similar limitation in the claim. See Petition at pp. 45-46. Hence, no *prima facie* case has been made as to claim 15 and claim 15 and its dependent claims should be deemed patentable over *Allen '218*.

For at least the foregoing reasons, Petitioner has failed to demonstrate a reasonable likelihood that it will prevail as to the challenged claims and this proposed ground for institution of *inter partes* review proceedings should be denied.

**C. The Petition Fails to Establish a Reasonable Likelihood that Claims 6, 8, and 14 are Unpatentable Over *Barnett* when Considered in Combination with of *Allen* ‘664.**

The combination of *Barnett*, U.S. Patent 5,664,093 (Oracle Ex. 1005) and *Allen* ‘664, U.S. Patent 5,581,664 (Oracle Ex. 1006) does not teach the saving of a state of a computer when a likely solution to a problem with the computer cannot be determined, as recited in claim 6. Hence, Petitioner has failed to demonstrate a reasonable likelihood that it will prevail as to the challenged claims and at least as to these grounds the Petition for *inter partes* review should be denied.

*Barnett* discloses a diagnostic system that uses received configuration and performance information to identify faults and provide solutions for those faults. *Ex. 1005* at col. 2, ll. 4-9. “*Barnett*, however, fails to teach or suggest the outcome when the diagnostic system cannot determine a likely solution.” Petition at p. 51. Furthermore, even Professor Mowry recognizes that *Barnett* does not teach saving of a state of a computer when a likely solution to a problem with the computer cannot be determined, as recited in claim 6. *Ex. 1007* at ¶ 69.

It is important to recognize that *Allen* ‘664 is not being cited for this missing feature. Instead, petitioner cites *Allen* ‘664 for teaching a case-based

scheme in which an inference engine may create a new case when no good match for a situation exists in a case base. Petition at p. 51. Therefore, even if the teachings of *Barnett* and *Allen* '664 were combined in the manner proposed in the Petition, this feature of claim 6 still would not be taught or suggested.

Petitioner's sole and only basis for finding the subject feature of claim 6 in the prior art is Professor Mowry's testimony that,

it would be clear to a person of ordinary skill in the art that in order for the programmer or user to understand how and when these additional rules should be added, a state of the computer system should be saved when the AI engine fails to determine a likely solution, so that the programmer or user can later determine the context when the failure took place. Since actions such as this are implemented via rules in a rule-based system, it would be natural and obvious to a skilled artisan to add a rule to the rule base that states that when a likely solution cannot be found, such a state of the computer system should be saved.

*Ex. 1007* at ¶ 69.

In making this statement, however, Professor Mowry seems to have overlooked the point that Petitioner wishes to use the case-based teachings of *Allen* '664, and not the rules-based teachings of *Barnett* in attacking the validity of claim 6. Petition at p. 51. Professor Mowry does not offer an opinion as to

whether or not one of ordinary skill in the art would find it obvious to save the state of a computer in such a situation. Indeed, it seems unlikely that one would do so as it would render the saving of case information somewhat superfluous.

Even if somehow one can harmonize the *Barnett* rule-based teachings with the *Allen* '664 case-based teachings, Professor Mowry's assertions regarding the actions of one of ordinary skill in the art are unconvincing. Recall that *Barnett* is actually silent about what to do when the diagnostic system cannot determine a likely solution." Petition at p. 51. While the need for additional rules may be recognized, Ex. 1005 at col. 7, ll. 1-6, there is nothing that suggests computer state would be included as part of these rules. After all, Barnett discusses a rules-based engine but makes no indication that any existing rules have any state information associated with them. Therefore, it seems rather unlikely that new rules would include such information.

Hence, for at least these reasons, the combination of *Barnett* and *Allen* '664 fails to teach or suggest each and every element of the challenged claims and, as a result, the Petitioner has failed to demonstrate a reasonable likelihood that it will prevail on the proposed rejections of claims 6, 8, and 14.

## 5. Conclusion.

For at least the foregoing reasons, Petitioner has failed to demonstrate a reasonable likelihood of prevailing on any of the proposed rejections of the claims. Accordingly, denial of the Petitioner's request for *inter partes* review of claims 1, 2, 25, 28, 32, and 50-57 is respectfully requested. Please charge any fees due to Deposit Account 50-5798.

Respectfully submitted,

Date: March 26, 2013

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## CERTIFICATE OF SERVICE

The undersigned hereby certifies that a copy of the foregoing:

### PATENT OWNER PRELIMINARY RESPONSE

was served on March 26, 2013, by filing this document through the Patent Review Processing System as well as delivering a copy via EXPRESS MAIL directed to the attorneys of record for the Petitioner at the following address:

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