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Paper 53
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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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LIBERTY MUTUAL INSURANCE CO.
Petitioner

v.

PROGRESSIVE CASUALTY INSURANCE CO.
Patent Owner

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Case CBM2013-00004
Patent 8,090,598

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Before JAMESON LEE, JONI Y. CHANG, and MICHAEL R. ZECHER, *Administrative Patent Judges*.

CHANG, *Administrative Patent Judge.*

# FINAL WRITTEN DECISION
*35 U.S.C. § 328(a) and 37 C.F.R. § 42.73*

# I. INTRODUCTION

Liberty Mutual Insurance Company ("Liberty") filed a petition on October 15, 2012, requesting a covered business method patent review of U.S. Patent No. 8,090,598 ("the '598 patent," Ex. 1001) pursuant to section 18(a) of the Leahy-Smith America Invents Act ("AIA").[1] Paper 4 ("Pet."). Progressive Casualty Insurance Company ("Progressive") filed a patent owner preliminary response. Paper 9 ("Prelim. Resp."). Taking into account Progressive's preliminary response, the Board determined that the information presented in Liberty's petition demonstrated that it was more likely than not that the challenged claims are unpatentable. Pursuant to 35 U.S.C. § 324, the Board instituted this trial on March 15, 2013, as to claims 1-78 of the '598 patent. Paper 11 ("Dec.").

During the trial, Progressive filed a patent owner response (Paper 19, "PO Resp."), and Liberty filed a reply to the patent owner response (Paper 25, "Reply"). An oral hearing was held on November 13, 2013.[2]

The Board has jurisdiction under 35 U.S.C. § 6(c). This decision is a final written decision under 35 U.S.C. § 328(a) as to the patentability of claims 1-78 of the '598 patent. We hold that claims 1-78 of the '598 patent are unpatentable under 35 U.S.C. § 102.

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[1] Pub. L. No. 112-29, 125 Stat. 284, 329 (2011).

[2] A transcript of the oral hearing is entered in the record as Paper 52 ("Tr.").

### *A. Related Proceeding*

Liberty indicates that the '598 patent was asserted against it in *Progressive Casualty Ins. Co. v. Safeco Ins. Co. of Ill.*, Case No. 1:10-cv-01370 (N.D. Ohio). Pet. 7.

### *B. The '598 Patent*

The '598 patent relates to a system for monitoring and communicating operational characteristics and operator actions (e.g., speeds driven) relating to a unit of risk (e.g., a motor vehicle) to determine the insurance cost for the unit of risk. Ex. 1001, 1:20-35. Figure 5 of the '598 patent, reproduced below, depicts an embodiment of the claimed invention of the '598 patent:

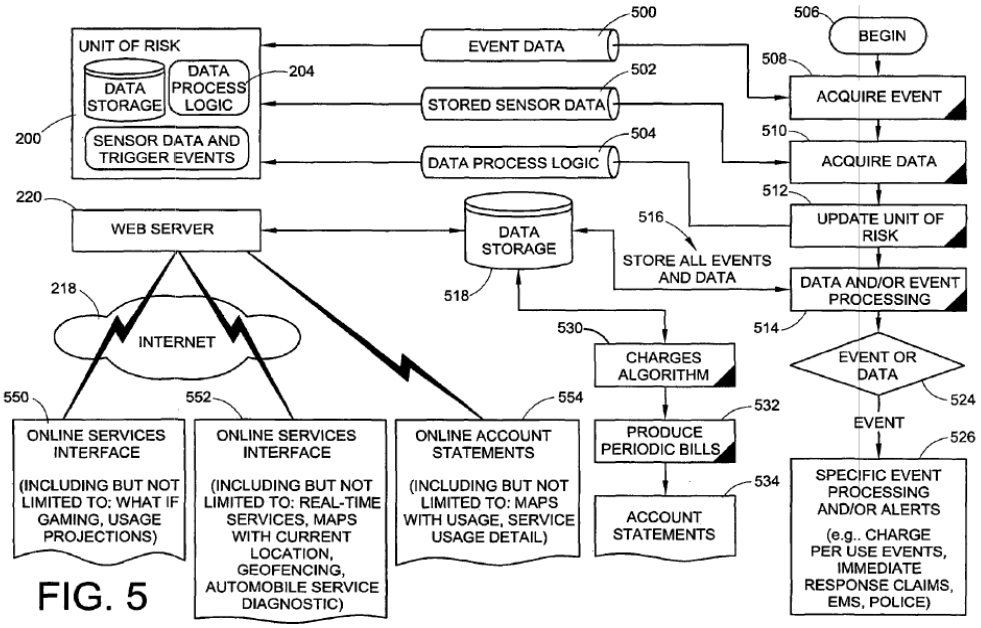

FIG. 5

As shown in Figure 5 of the '598 patent, unit of risk 200 has a data storage, data process logic, and an onboard device that monitors and records sensor data and trigger events. *Id.* at 7:27-32; 12:31-36; fig. 3. All relevant

data is stored in data storage device 518. *Id*. at 12:61-62. Billing or estimating algorithm 530 accesses the data or events to generate a cost of insurance for the unit of risk. *Id*. at 13:5-8. As shown in Figure 5, the insurer's system also provides web server 220 to allow a customer to access via Internet 218 the relevant sensor data and event data associated with the customer. *Id*. at 13:24-29; figs 10-17. In particular, the insurer's system provides prospective on-line interface 550 and interface 552 for reporting acquired data. *Id*. at 13:30-32.

### *C. Representative Claim*

Of the challenged claims, claims 1, 31, 32, 33, 48, and 78 are independent claims. Claims 2-30 depend from claim 1, claims 34-47 depend from claim 33, and claims 49-77 depend from claim 48.

Claim 1 is representative:

1. A risk management system comprising:

> a *server receiver* configured to wirelessly receive selected onboard vehicle data monitored by an in-vehicle data monitoring device within a vehicle;
>
> a *network server system* coupled to the server receiver that provides an interface having functionality configured to establish relationships between the selected onboard vehicle data and levels of risk in a usage based insurance system;
>
> a *database that stores relationship data* indicating the relationships established between the selected onboard vehicle data relating to one or more users and an insured's monitored vehicle data, where the relationship data identifies, for an insured or other selected users, relationships between relative levels of risk and the selected onboard vehicle data; and

> an *interface module* configured to *search the database* for a risk assessment of vehicle data, where the interface module is *responsive to a request from a database user* by using the relationship data and the selected onboard vehicle data to *identify the level of risk*;
>
> where the *interface module* is further configured to be responsive to *a request to quantify driver behavior* by processing the selected onboard vehicle data to render a *driver safety score*, where the driver safety score is characterized as a level of risk associated with insuring a selected operator or a vehicle.

Ex. 1001, 28: 23-49 (emphases added).

*D. Covered Business Method Patent*

Upon consideration of Liberty's contentions in the petition and Progressive's arguments in the preliminary response, the Board, in the Decision on Institution, determined that the '598 patent is a covered business method patent as defined in section 18(a)(1)(E) of the AIA and 37 C.F.R. § 42.301, because at least one claim of the '598 patent is directed to a covered business method. Dec. 3-9. Accordingly, the Board concluded that the '598 patent is eligible for a covered business method patent review. *Id*.

In its patent owner response, Progressive argues that the Board must conduct a claim-by-claim analysis and determine that every challenged claim is directed to a covered business method, before it is authorized, under section 18(a)(1)(E) of the AIA, to review all of the challenged claims. PO Resp. 2-3, n.1. Progressive asserts that the Board exceeded its statutory authority by instituting "review of any patent claim which the Board has not determined to be directed to a covered business method." *Id*.

Progressive's argument is based on an erroneous statutory construction that interprets the word "patent" in the statutory provision on what is subject to review as "claim." We decline to adopt such an interpretation.

As in any statutory construction analysis, we begin with the language of the statute. *In re Swanson*, 540 F.3d 1368, 1374-75 (Fed. Cir. 2008); *Duncan v. Walker*, 533 U.S. 167, 172 (2001); *Crandon v. United States*, 494 U.S. 152, 158 (1990). "In the absence of a clearly expressed legislative intention to the contrary, the language of the statute itself must ordinarily be regarded as conclusive." *United States v. James*, 478 U.S. 597, 606 (1986) (internal quotation marks and citations omitted). "It is well settled law that the plain and unambiguous meaning of the words used by Congress prevails in the absence of a clearly expressed legislative intent to the contrary." *Hoechst AG v. Quigg*, 917 F.2d 522, 526 (Fed. Cir. 1990).

Section 18(d)(1) of the AIA defines the term "covered business method patent" to mean (emphases added):

> [A] *patent* that claims a method or corresponding apparatus for performing data processing or other operations used in the practice, administration, or management of a financial product or service, except that the term does not include *patents* for technological inventions.

If Congress intended to limit the availability of the covered business method patent review on a claim-by-claim basis, as urged by Progressive, it could have used the term "claim" rather than "patent." Notably, when specifying the subject matter for review, Congress could have used the

language "a *claim* that is directed to a method or corresponding apparatus" rather than "a *patent* that claims a method or corresponding apparatus." Section 18(d)(1) of the AIA sets forth a single threshold based on just one claim—the satisfaction of which qualifies an entire patent as eligible for review—rather than a test that must be applied on a claim-by-claim basis to justify review of each claim.[3] Therefore, a *patent* is eligible for a covered business method patent review if the subject matter of at least one claim is directed to a covered business method. Nothing in the legislative history, or other parts of the AIA, requires us to deviate from the plain meaning of the definition set forth in section 18(d)(1) of the AIA, as proposed by Progressive. Moreover, Progressive has not identified any statutory provision or legislative history that requires "each" claim for which trial is instituted to meet the test for a covered business method patent. Further, Progressive provides no persuasive explanation as to why the Board's analysis was incorrect. PO Resp. 2-3, n. 1.

For the foregoing reasons, we disagree with Progressive that the Board exceeded its statutory authority by instituting a covered business method patent review as to claims 1-31 and 33-78 of the '598 patent.

[3] *See also* Transitional Program for Covered Business Method Patents – Definitions of Covered Business Method Patent and Technological Invention; Final Rule, 77 Fed. Reg. 48734, 48736 (Aug. 14, 2012).

### *E. Prior Art Relied Upon*

Liberty relies upon the following prior art references:

| | | | |
|---|---|---|---|
| Burge | U.S. Pub. App. 2002/111725 | Aug. 15, 2002 | (Ex. 1003) |
| Nakagawa | U.S. Pub. App. 2002/0128882 | Sept. 12, 2002 | (Ex. 1004) |
| Herrod | GB 2 286 369 A | Aug. 16, 1995 | (Ex. 1005) |

Paul Dorweiler, *Notes on Exposure and Premium Bases in* XVI, Part II, PROCEEDINGS OF THE CASUALTY ACTUARIAL SOCIETY 319-343 (1930) ("Dorweiler") (Ex. 1006).

### *F. Grounds of Unpatentability*

The Board instituted the instant covered business method patent review based on the following grounds of unpatentability:

| **Claims** | **Basis** | **References** |
|---|---|---|
| 1-78 | § 102 | Burge |
| 1-78 | § 102 | Nakagawa |
| 16, 17, 63, and 64 | § 103 | Burge and Herrod |
| 47 | § 103 | Nakagawa and Herrod |

## II. ANALYSIS

### *A. Claim Construction*

In a covered business method patent review, claim terms are given their broadest reasonable construction in light of the specification of the patent in which they appear. 37 C.F.R. § 42.300(b). Under the broadest

reasonable construction standard, claim terms are given their ordinary and customary meaning as would be understood by one of ordinary skill in the art in the context of the entire disclosure. *In re Translogic Tech. Inc.*, 504 F.3d 1249, 1257 (Fed. Cir. 2007). An inventor may rebut that presumption by providing a definition of the term in the specification with reasonable clarity, deliberateness, and precision. *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994). In the absence of such a definition, limitations are not to be read from the specification into the claims. *In re Van Geuns*, 988 F.2d 1181, 1184 (Fed. Cir. 1993).

*1. "rating factor" (claim 40)*

The claim term "rating factor" is recited in claim 40, which states "where the driver safety score comprises a *rating factor* that quantifies an insurable risk." Ex. 1001, 32:1-3. Liberty states that under the rule of broadest reasonable interpretation, "rating factor" means "a calculated insurance risk value such as a safety score or a usage discount." Pet. 21. In support of that assertion, Liberty points to portions of the '598 patent. Pet. 21 (citing Ex. 1001, 22:18-22 ("In the exemplary embodiment, the discount section 818 of the operational summary 814 indicates that a total discount 852 is based upon a calculation including an upload bonus 854, *a rating factor, such as a safety score 856 and a usage discount 858*."); and 23:9-13 ("The usage discount detail section 1018 indicates that the usage discount 1022 is a function of a starting discount 1024, and rating factors, such as, a daytime mileage adjustment 1026, a nighttime mileage adjustment 1028 and a high risk mileage adjustment 1030.")).

In the Decision on Institution, we determined that Liberty's interpretation is consistent with the specification of the '598 patent, and adopted Liberty's proposed construction as the broadest reasonable interpretation, but added the clarification that an insurance risk value would be a value that reflects an associated level of insurance risk and, therefore, also a corresponding insurance premium. Dec. 15-16. Progressive agrees with our claim construction. PO Resp. 10. We apply the same construction in this decision.

*2. "driver safety score" (claims 1-32 and 34-42, 48-78)*

The claim term "driver safety score" is recited in all of the independent claims, except claim 33. For instance, claim 1 recites "where the interface module is further configured to be responsive to a request to quantify driver behavior by processing the selected onboard vehicle data to render a driver safety score, where the *driver safety score* is characterized as a level of risk associated with insuring a selected operator or a vehicle." Ex. 1001, 28:44-49. Liberty construes "driver safety score" to mean "a *calculated* insurance risk value associated with driver safety." Pet. 21-22. In support of that assertion, Liberty directs our attention to portions of the specification of the '598 patent. *Id*. (citing Ex. 1001, 22:18-22, 22:52-55 ("The safety score explanation section 918 indicates the safety score is a function 920 of an excessive speed factor 922, an aggressive acceleration factor 924 and an excessive braking factor 926."); and 23:1-3 ("The safety score explanation window 918 indicates that the safety score is a weighted function 920 of the factors 922, 924, 926.")).

The specification of the ’598 patent is reasonably clear that the driver safety score is a calculated value. Notably, Figure 9 of the ’598 patent, reproduced below, illustrates a display screen summarizing the data regarding operational aspects of a vehicle with information related to a cost of insurance (oval added for emphasis). Ex. 1001, 5:38-40.

FIG. 9

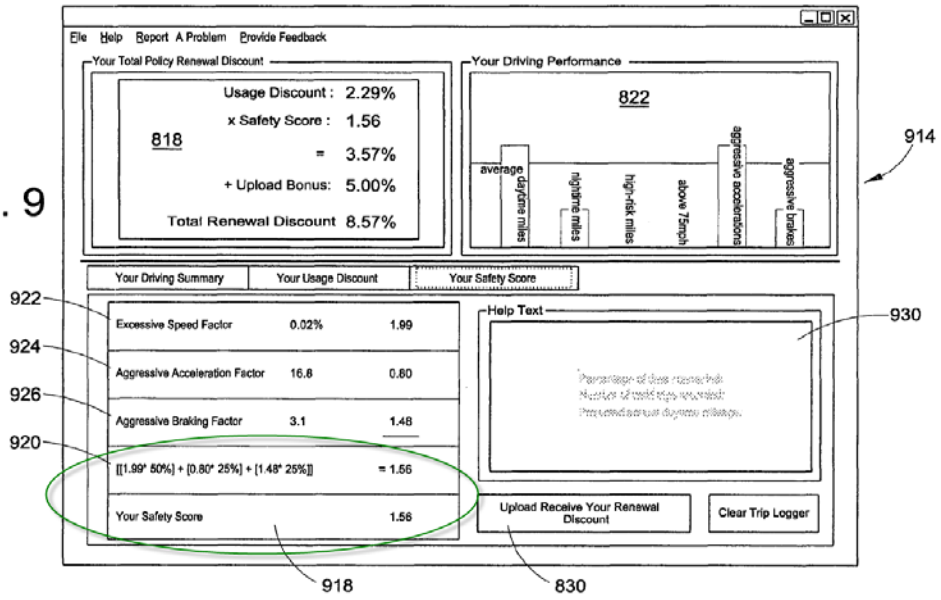


Figure 9 depicts a safety score explanation section (918) which indicates the safety score *is a weighted function* (920) (“[[1.99 * 50%] + [0.80 * 25%] + [1.48 * 25%]] = 1.56 (safety score)”) of an excessive speed factor (922), an aggressive acceleration factor (924) and an excessive braking factor (926). Ex. 1001, 22:48-49, 22:52-55, and 23:1-3.

In the Decision on Institution, we adopted Liberty’s construction by interpreting the claim term “driver safety score” as “a *calculated* insurance risk value associated with driver safety” because it is consistent with the specification of the ’598 patent. Dec. 16-18. Progressive agrees with our

claim construction. PO Resp. 10. We apply the same construction in this decision. We also observe that a driver safety score is merely an example of a rating factor because, as discussed above, the claim term "rating factor" is construed as "a calculated insurance risk value *such as* a safety score or a usage discount."

*3. "driver safety data" (claim 33 and 43-47)*

Claim 33 recites "an interface module configured to process the database for a risk assessment of vehicle data, where the interface module is responsive to a request to quantify driver behavior by processing the monitored vehicle data to generate *driver safety data* that characterizes the level of risk associated with insuring a selected operator or a vehicle." Ex. 1001, 31:43-49.

Liberty construes "driver safety *data*" to have the same meaning as "driver safety *score*," namely "a *calculated* insurance risk value associated with driver safety." Pet. 21. In its patent owner preliminary response, Progressive counters that the terms "driver safety *score*" and "driver safety *data*" are not identical. According to Progressive, "driver safety *data*" can constitute data other than a "driver safety score." Prel. Resp. 30 (citing claim 34). We agree with Progressive.

Claim 34 depends from claim 33 and recites "where the *driver safety data* comprises a *driver safety score*." Ex. 1001, 31:50-51. It is clear from that claim language that "driver safety data" has a broader scope than "driver safety score."

Accordingly, we construe the claim term "driver safety *data*" broadly, but reasonably as encompassing "driver safety score" and other data associated with driver safety.

*4. "insurance rating" (see, e.g., claims 48 and 78)*

Liberty construes the claim term "insurance rating" to mean "a/some value/cost used to determine an overall cost associated with insurance of the vehicle." Pet. 22. Progressive presents no opposition to that interpretation. PO Resp. 10-13. We agree with Liberty's construction as it is reasonable and broad, as well as consistent with the specification of the '598 patent.

*5. "level of risk" (claims 1, 31-33, 42, and 78 )*

Liberty, in its petition, did not proffer a construction for the claim term "level of risk." Progressive, in its patent owner preliminary response, also did not submit a construction for that term. In the Decision on Institution, we did not construe the claim term expressly.

However, Progressive, in its patent owner response, asserts that a person with ordinary skilled in the art would have understood that the claim term "level of risk" is the level of risk associated with an actuarial class, and the level of risk is assessed with respect to selected onboard vehicle data. PO Resp. 12 (citing Ex. 2011 ¶ 34). Progressive also argues that the claim term "level of risk" does not require a level of risk to be "assigned based at least in part on the indicated level of willingness of the driver to allow at least one aspect to be recorded." *Id*. at 10. According to Progressive, "the '598 patent contemplates that a level of risk may be assessed on the basis of

any of a variety risk characteristics," and "associates an actuarial class with a level of risk." *Id*. at 11-12 (citing Ex. 1001: 1:53-55; 2:37-46). Progressive further asserts that in a usage-based insurance, placement of an insured establishes a relationship between the onboard vehicle data and a level of risk (e.g., a "high risk category or actuarial tier"). *Id*. at 12.

Liberty counters that assigning a level of risk in the context of the '598 patent is more specific. Reply 3 (citing Ex. 1001, col. 14-16, 21-22, Fig. 7, 726). Liberty argues that the '598 patent purportedly solves the problem of the conventional system by "providing means for the operator to control the submission of information to the insurer and by allowing the operator to understand how modifying operational behavior affects the cost of insurance." *Id*. (citing Ex. 1001, 4:21-31, 42-46).

Upon review of the parties' contentions, we agree with Progressive that the claim term "level of risk" does not require a level of risk to be "assigned based at least in part on the indicated level of willingness of the driver to allow at least one aspect to be recorded." PO Resp. 10. Figure 7 of the '598 and related description (Ex. 1001, 14-15) merely illustrates an example. We observe that neither party alleges that the inventor of the '598 patent acted as his own lexicographer and provided a special definition in the specification for the claim term "level of risk" that is different from its recognized meaning to one with ordinary skill. Therefore, we decline to import the limitations from the example disclosed in the specification into the claims. *See Deere & Co. v. Bush Hog, LLC*, 703 F.3d 1349, 1354 (Fed. Cir. 2012) ("While claim terms are understood in light of the specification, a

claim construction must not import limitations from the specification into the claims."). We further agree with Progressive that "a cost of insurance is one metric for identifying a level of risk for an operator" if the cost of insurance is determined based on the usage of the vehicle. PO Resp. 35-36.

Nevertheless, we cannot discern how the arguments presented by both parties add any clarity to the claim term "level of risk," which, though broad, is relatively simple. Therefore, we do not believe an explicit construction is necessary beyond the claim term's ordinary and customary meaning.

*6. "selected onboard vehicle data" (claims 1 and 33)*

Neither party proffers a construction for the claim term "selected onboard vehicle data." Under the rule of broadest reasonable interpretation, "selected onboard vehicle data" means nothing more than "certain onboard vehicle data." Our interpretation is consistent with the disclosure of the '598 patent. For instance, the disclosure states that vehicle data elements monitored and/or recorded include raw data elements, calculated data elements, and derived data elements. Ex. 1001, 8:35-37. It is evident that the term is meant to be inclusive, not restrictive. Thus, we do not limit "selected onboard vehicle data" to just raw data sensed by sensors. Instead, it covers *processed or calculated onboard vehicle data*. In summary, the claim term "selected onboard vehicle data" means "certain onboard vehicle data," and note that it covers onboard vehicle data transformed by *processing or calculation*. The particular forms of processing and calculation referenced in the specification merely are examples, and we do

not consider them as limitations on the covered transformation, under the rule of broadest reasonable interpretation.

*7. "database" (claims 1, 31-33, 48, and 78)*

Neither party proposed a construction for the claim term "database." We have construed the claim term "database" in *Liberty Mutual Insurance Co. v. Progressive Casualty Insurance Co.*, CBM2012-00003, which involves U.S. Patent No. 8,140,358 that claims the benefit of the filing date of the application that issued as the '598 patent. Consequently, we adopt that claim construction in this proceeding, and construe the claim term "database" as "a memory in which the stored data are searchable by the content of a particular field in the data entries stored therein." *See NTP, Inc. v. Research In Motion, Ltd.*, 418 F.3d 1282, 1293 (Fed. Cir. 2005) (When construing claim in patents that derive from the same parent application and share common terms, "we must interpret the claims consistently across all asserted patents.").

*B. Whether the challenged claims are entitled to an earlier filing date*

All of the grounds of unpatentability asserted by Liberty are based on either Burge or Nakagawa. Pet. 22; Prelim. Resp. 21. Liberty, in its petition, asserts that claims 1-78 of the '598 patent are not entitled to the benefit of the filing date (May 15, 2000) of U.S. Patent Application No. 09/571,650 ("the '650 application," Ex. 2009), because the '650 application lacks the written description to support the challenged claims. Pet. 15.

In its patent owner preliminary response, Progressive counters that in a covered business method patent proceeding, Burge and Nakagawa do not qualify as prior art against the claims of the '598 patent, which have an effective filing date (May 15, 2000) before the publication dates of Burge (August 15, 2002) and Nakagawa (September 12, 2002).[4] Prelim. Resp. 21-22. In support of that assertion, Progressive argues that the claims of the '598 patent are entitled to the benefit of the filing date of the '650 application. *Id*. In its patent owner response, Progressive submits additional evidence and arguments, including two expert declarations (Ex. 2011 and Ex. 2013) and claim charts (PO Resp. 60-79), to substantiate its position.

Upon reviewing the parties' arguments and supporting evidence, we have reevaluated our determination in the Decision on Institution (Dec. 19-30) that certain claim features lack written description support in the '650 application. For example, we agree with Progressive that the claim term "a level of risk" does not require a level of risk to be "assigned based at least in part on the indicated level of willingness of the driver to allow at least one aspect to be recorded." PO Resp. 10. Nevertheless, based on the record before us, we determine that the original disclosure of the '650 application does not support the claimed subject matter set forth in claims 1-78 of the '598 patent. For the reasons stated below, we determine that claims 1-78 of

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[4] Under section 18(a)(1)(C) of the AIA, a petitioner in a transitional proceeding who challenges the validity of one or more claims in a covered business method patent on grounds of unpatentability raised under §§ 102 and 103 may only support such grounds on the following basis:

(i) prior art that is described by section 102(a) of such title. . . .

the ’598 patent are not entitled to the benefit of the filing date of the ’650 application—May 15, 2000. Consequently, Burge and Nakagawa are available as prior art in this proceeding and Liberty may rely upon these references to demonstrate that claims 1-78 are unpatentable under 35 U.S.C. §§ 102 or 103.

Principles of Law

Under 35 U.S.C. § 120, a patent claim is entitled to the benefit of the filing date of an earlier-filed application only if the disclosure of the earlier-filed application provides written description support for the patent claim as required by 35 U.S.C. § 112. *In re Chu*, 66 F.3d 292, 297 (Fed. Cir. 1995). The test for determining compliance with the written description requirement under 35 U.S.C. § 112, ¶ 1, is whether the original disclosure of the earlier-filed application reasonably would have conveyed to one with ordinary skill in the art that the inventor had possession the claimed subject matter at the time of the earlier-filed application. *Ariad Pharm., Inc. v. Eli Lilly & Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (en banc); *In re Kaslow*, 707 F.2d 1366, 1375 (Fed. Cir. 1983). The specification must convey with reasonable clarity to those skilled in the art that the inventor was in possession of the claimed subject matter, as of the filing date of the earlier-filed application. *Vas-Cath Inc. v. Mahurkar*, 935 F.2d 1555, 1563-64 (Fed. Cir. 1991).

The disputed claim features

All of the independent claims of the '598 patent require an interface module configured to render a driver safety score or generate driver safety data that characterizes the level of risk associated with insuring a selected operator or a vehicle, by processing the selected onboard vehicle data, in response to a request to quantify driver behavior. Pet. 15-16. For instance, claim 1 recites the following "interface module" limitations:

> an interface module configured to search the database for a risk assessment of vehicle data, where the interface module is responsive to a request from a database user by using the relationship data and the selected onboard vehicle data to identify the level of risk;
>
> where the interface module is further configured to be responsive to a request to quantify driver behavior by processing the selected onboard vehicle data to render a driver safety score, where the driver safety score is characterized as a level of risk associated with insuring a selected operator or a vehicle.

Ex. 1001, 28:39-49.

Claim 33 recites the following "interface module" limitation:

> an interface module configured to process the database for a risk assessment of vehicle data, where the interface module is responsive to a request to quantify driver behavior by processing the monitored vehicle data to generate driver safety data that characterizes the level of risk associated with insuring a selected operator or a vehicle.

Ex. 1001, 31:43-49.

As stated above, the broadest reasonable interpretation of the claim term "driver safety score" is "a calculated insurance risk value associated

with driver safety." Although the claim term "driver safety data" encompasses "driver safety score" and "other data associated with driver safety," the "driver safety data" limitation as recited in claim 33 requires more than "other data associated with driver safety." That is because the limitation requires that the interface module to generate driver safety data by *processing the monitored vehicle data* in response to a request to *quantify driver behavior*, and that the driver safety data *characterizes* the level of risk associated with insuring a selected operator or a vehicle.

Interface Module

In its petition, Liberty asserts that the '650 application does not disclose a driver safety score or quantifiable driver safety data that establish or characterize a level of risk associated with insuring a selected user or vehicle, as required by the challenged claims. Pet. 15-17.

On the other hand, Progressive maintains that estimating a cost for insuring a vehicle in the '650 application inherently involves determining and applying a driver safety score. PO Resp. 39-41. Progressive takes the position that the '650 application "discloses an interface module that is responsive to a request from a database user to identify the level of risk." *Id*. at 37-38. According to Progressive, the interface module uses the relationship data and selected onboard data to identify a level of risk (e.g., actuarial class), in response to requests for insurance cost determinations. PO Resp. 37 (citing Ex. 2013 ¶¶ 42, 47). As support, Progressive provides three examples where the '650 application allegedly discloses such interface module: (1) an interface module is used for

accessing the database by the charges algorithm (citing Ex. 2013 ¶ 47); (2) an interface module is used for accessing the database by the web server for "what if" gaming (citing Ex. 2013 ¶ 50); and (3) an interface module is used for accessing the database by a web server for communicating operating characteristics and the insurance cost between the insurer and the insured (citing Ex. 2013 ¶ 56). PO Resp. 37-38; *see also* Ex. 2013 ¶¶ 42-66.

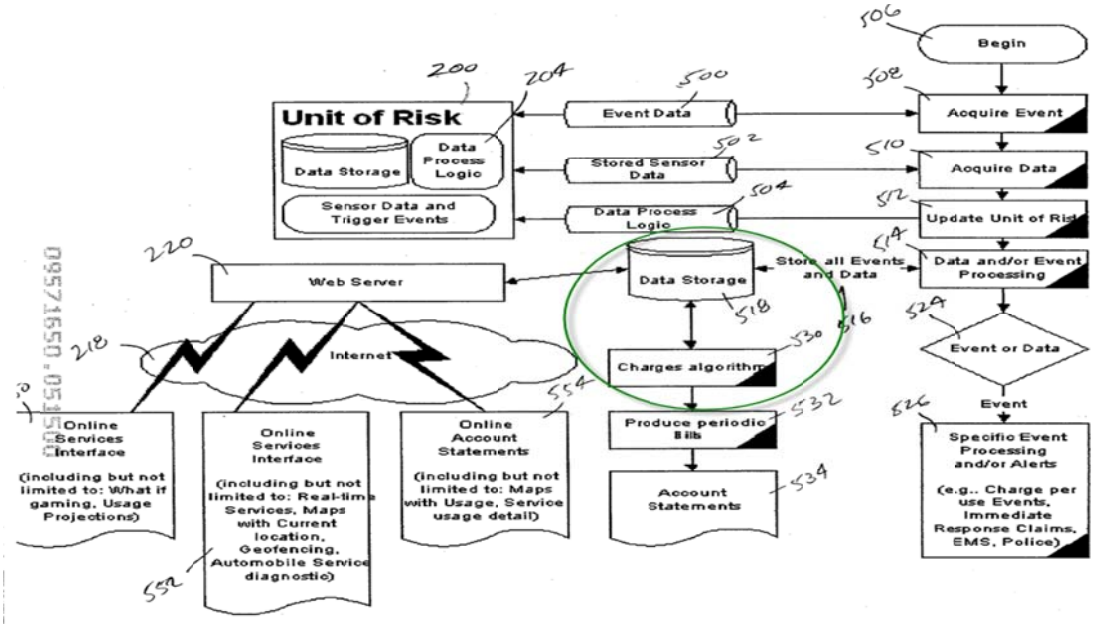
We are not persuaded by Progressive's arguments and expert testimony. We address each of those examples proffered by Progressive's expert testimony in turn.

First Example – Charges Algorithm

We have reviewed Progressive's contention and expert testimony, as well as the original disclosure of the '650 application. Contrary to Progressive's expert testimony that an *interface module* is used for accessing the database by the *charges algorithm* (PO Resp. 38; Ex. 2013 ¶¶ 43-48, 57-61), neither the drawings nor the specification of the '650 application discloses an *interface module* between the data storage and charges algorithm. We recognize that drawings alone *may* be sufficient to provide the written description of the claimed subject matter. *Vas-Cath*, 935 F.2d at 1564. However, Progressive's expert testimony erroneously relies on merely an *arrow* connecting data storage 518 and charges algorithm 530 to provide written description support for an *interface module* that is configured to render a driver safety score that is characterized as a level of risk associated with insuring a selected operator or vehicle, in response to a

risk assessment database user's request to quantify driver behavior. Ex. 2013 ¶¶ 43, 58-60; fig. 5.

Figure 5 of the '650 application, reproduced below, illustrates the use of acquired data (emphasis added):

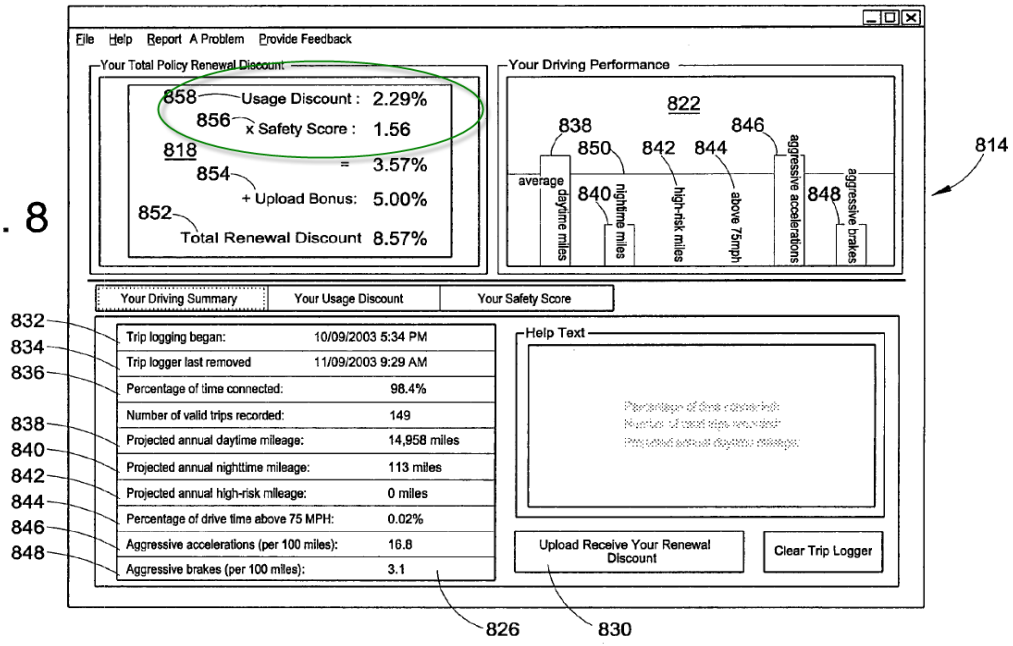



As depicted in Figure 5, web server 220 is connected to three online interface modules: (1) "What if" online services interface 550; (2) online services interface 552; and (3) online account statements 554. However, no *interface module* is shown between data storage 518 and charges algorithm 530, as alleged by Progressive. In fact, the '650 application contains no disclosure that charges algorithm 530 displays any information to a user, much less a driver safety score. At most, the arrow between the data storage 518 and charges algorithm 530 shows the transfer of data between the two items. However, it does not convey reasonably to one with ordinary skill in the art that the inventors of the '598 patent had possession

of an *interface module* configured to render a driver safety score, or driver safety data, that is characterized as a level of risk associated with insuring a selected operator or vehicle, in response to a database user's request to quantify driver behavior, as claimed.

We recognize that the '650 application and the '598 patent have overlapping disclosures. For instance, as Progressive's counsel pointed out at the final oral hearing, Figure 5 of the '650 application is the same figure found in Figure 5 of the '598 patent. Tr. 34:16- 35:15. However, as Liberty noted (Reply 7), the '598 patent discloses an additional twelve figures and thirteen columns of text, including Figures 8-17 of the '598 patent that illustrate display screens of an interface module showing a safety score, usage discount, insurance discount, and vehicle operating performance summary. Figure 8 of the '598 patent, reproduced below, shows an example of a display screen (emphasis added):

FIG. 8



As shown in Figure 8 of the ’598 patent, the display screen clearly shows the user his or her safety score, usage discount, insurance discount, and vehicle operating performance summary. We observe that the additional figures and related description regarding the *interface module* configured to search a risk assessment database and to render a driver safety score that are disclosed in the ’598 patent do not appear in the ’650 application. Therefore, Progressive’s argument that the challenged claims are supported by the ’650 application because the ’650 application contains the same Figure 5 as the ’598 patent is unavailing.

The specification of the ’650 application also does not disclose an *interface module* with the claimed functionalities between data storage 518 and charges algorithm 530. The ’650 application generally describes that data stored in conventional data storage 518 are *accessed by* charges algorithm 530. Ex. 2009, 19:23-24; 19:30-20:1; fig. 5. Although we recognize that data transfer occurs between data storage 518 and charges algorithm 530, nothing in the ’650 application discloses that data storage 518 has the capability to render a driver safety score in response to a database user’s request. Nor does the ’650 application disclose that charges algorithm 530 has the capability to permit a user to submit a request to data storage 518 to obtain a driver safety score.

A general disclosure of *accessing data* by a charges algorithm from a data storage is not sufficient to convey to one with ordinary skill in the art that the inventors of the ’598 patent had possession of an *interface module* configured to render a driver safety score, or driver safety data, that is

characterized as a level of risk associated with insuring a selected operator or vehicle, in response to a database user's request to quantify driver behavior, as claimed.

Second Example – "What if" Gaming Interface

Mr. Ivan Zatkovich testifies that the "what if" gaming operations executing on web server 220 of Figure 5 *necessarily* involves "using the relationship data and the selected onboard vehicle data to identify the level of risk" as recited in claim 1. Ex. 2013 ¶¶ 50-53 (Ex. 2009, 20:18-19); *see also id*. at ¶¶ 62-64 (citing Ex. 2009, 7:29-30). Progressive takes the position that estimating a cost for insuring a vehicle *inherently involves* determining and applying a driver safety score. PO Resp. 39-40. As support, Mr. Michael Miller, testifies that determining premiums using actuarial classes based on actual driving characteristics *necessarily involves* rate factors and risk factors that are associated with driver safety and, therefore, constitute driver safety scores. Ex. 2011 ¶¶ 39-40.

Liberty counters that insurance costs may be determined based on detected driving characteristics without necessarily generating a driver safety score first. Reply 4 (citing Ex. 1026 ¶¶ 29-38, 5-25). Liberty also asserts that a person with ordinary skill in the art would not have understood that the '650 application necessarily discloses the additional calculation of a driver safety score, as it does not provide any disclosure on how to apply actuarial classes to determine premiums. *Id*. Liberty further submits that a premium cannot be a rating factor or driver safety score because different terms have different meanings. *Id*. at 6-7.

Upon review of the parties' arguments and supporting evidence, we are not persuaded by Progressive's arguments and expert testimony. Rather, we agree with Liberty that a determination of an insurance cost does not inherently involve rendering a driver safety score. *See In re Robertson*, 169 F.3d 743, 745 (Fed. Cir. 1999) (Inherency may not be established by probabilities or possibilities.). We are cognizant that the '650 application need not describe the claimed subject matter in exactly the same way as the terms used in the claims. *See In re Wright*, 866 F.2d 422, 425 (Fed. Cir. 1989); *Eiselstein v. Frank*, 52 F.3d 1035, 1038 (Fed. Cir. 1995). Nonetheless, in order to satisfy the written description support requirement, a person with ordinary skill in the art would have recognized that the inventor possessed what is claimed in the later-filed application as of the filing date of the earlier-filed application. *See Noelle v. Lederman*, 355 F.3d 1343, 1348 (Fed. Cir. 2004). The specification of the earlier-filed application "must contain an equivalent description of the claimed subject matter." *Lockwood*, 107 F.3d at 1572.

Here, the '650 application discloses:

> The prospective interface relates to "what if" gaming where a customer can project certain usages of the unit of risk, and the system can, in combination with similar occurring usage in the past or, based upon the overall customer profile or matrix, project [an] estimated cost for such usage. In effect, a user can determine in advance what particular usage of the unit will incur as *insurance cost* with a very reliable associated *insurance estimate*.

Ex. 2009, 20:18-23 (emphasis added).

The ’650 application does not disclose a *driver safety score*, much less an *interface module* configured to render a driver safety score that is characterized as a level of risk associated with insuring a selected operator or vehicle, in response to a request to quantify driver behavior, as claimed. The “what if” online services interface, as disclosed in the ’650 application, provides the user merely an *estimated insurance cost*.

There is no dispute that an insurance cost is *not* a driver safety score. Progressive agrees that the claim term “driver safety score” means “a calculated insurance risk value associated with driver safety” and the claim term “rating factor” means “a calculated insurance risk value *such as* a safety score or a usage discount.” PO Resp. 10. As the specification of the ’598 patent explains, an insurance cost is *calculated* based upon a rating factor, *such as* a safety score. Ex. 1001, 22:19-22. That is, a driver safety score is merely an *example* of a rating factor. Thus, a determination of an insurance cost does not necessarily involve rendering a driver safety score.

We disagree with Progressive’s assertion that “a driver safety score comprises a rating factor.” PO Resp. 40. In support of that assertion, Progressive cites to claim 40 of the ’598 patent, which recites “the driver safety score comprises a rating factor that quantifies an insurable risk.” Ex. 1001, 32:1-3. However, that reliance on claim 40 is misplaced because claim 40 is not part of the original disclosure of the application that issued as the ’598 patent. Rather, that claim was added, as claim 232, by an amendment filed on December 9, 2008, after the filing of the application that issued as the ’598 patent. In fact, the original disclosure of the application

issued as the ’598 patent provides that a driver safety score is *an example* of a rating factor. Ex. 1001, 22:19-22. Therefore, Progressive’s assertion is not supported by the original disclosure of the application issued as the ’598 patent. In any event, an insurance cost is neither a rating factor nor a driver safety score.

Although an insurance cost *may* be calculated based on a driver safety score, that fact alone is insufficient to establish that a determination of insurance cost *inherently* involves rendering a driver safety score. *See Robertson*, 169 F.3d at 745 (Inherency may not be established by probabilities or possibilities.). Further, the “what if” online services interface, as disclosed in the ’650 application, does not provide an actual driver safety score to a user in response to a request to quantify driver behavior, as required the claims. It is well settled that “[e]ntitlement to a filing date does not extend to subject matter which is not disclosed but would be obvious over what is expressly disclosed.” *Lockwood*, 107 F.3d at 1571-72. “It is not sufficient for purposes of the written description requirement of § 112 that the disclosure, when combined with the knowledge in the art, would lead one to speculate as to modifications that the inventor might have envisioned, but failed to disclose.” *Id*. Therefore, a general disclosure of a web server providing an estimated insurance cost is not sufficient to convey to one with ordinary skill in the art that the inventors of the ’598 patent had possession of an *interface module* configured to render a driver safety score, or driver safety data, that is characterized as a

level of risk associated with insuring a selected operator or vehicle, in response to a database user's request to quantify driver behavior, as claimed.

Third Example – Data Reports and Account Statements

In support of Progressive's arguments, Mr. Zatkovich testifies that a person with ordinary skill in the art would have understood that "the '650 application necessarily discloses a database accessing capability so that the web servers 220 can provide the insured with the recorded data as well as the rating and billing 222 information." Ex. 2013 ¶ 55 (citing Ex. 2009, 1:18-24; 19:2-4). Mr. Zatkovich further testifies that a person with ordinary skill in the art would have understood that "the '650 application shows that web site 220 allows the viewing of rating information and billing information which would include the risk factors and rate factors generated as part of the computed costs and billing process." Ex. 2013 ¶ 65 (citing Ex. 2009, 1:18-24; 7:24-26; 19:2-4).

We are not persuaded by Progressive's arguments and expert testimony. As discussed above, determining an insurance cost does not necessarily involve rendering a driver safety score. *See Robertson*, 169 F.3d at 745 (Inherency may not be established by probabilities or possibilities.). Rather, as Liberty points out, an insurance cost is calculated based on a rating factor, and a driver safety score is only an *example* of a rating factor. Reply 6; Ex. 1001, 22:19-22 (A total discount is based upon a calculation including an upload bonus, a rating factor, *such as* a safety score.).

Further, a general disclosure of a web server providing insurance rating information, billing information, and recorded monitored vehicle data

to a user is *not* an equivalent of an interface module configured to render a driver safety score, or driver safety data, that is characterized as a level of risk associated with insuring a selected operator or vehicle, by processing the monitored vehicle data, in response to a database user's request to quantify driver behavior, as claimed. *See Lockwood*, 107 F.3d at 1572 (The specification of the earlier-filed application "must contain an equivalent description of the claimed subject matter."). Such a general disclosure is not sufficient to convey to one with ordinary skill in the art that the inventors of the '598 patent had possession of an interface module having the claimed functionalities. "A description which renders obvious the invention for which an earlier filing date is sought is not sufficient." *See Lockwood*, 107 F.3d at 1572. Nor does the claimed subject matter could have been "envisioned" from the earlier disclosure establish adequate written description support. *Goeddel v. Sugano*, 617 F.3d 1350, 1356 (Fed. Cir. 2010).

### *C. Principles of Law*

To establish anticipation under 35 U.S.C. § 102, each and every element in a claim, arranged as is recited in the claim, must be found in a single prior art reference. *Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1369 (Fed. Cir. 2008); *Karsten Mfg. Corp. v. Cleveland Golf Co.*, 242 F.3d 1376, 1383 (Fed. Cir. 2001).

A patent claim is unpatentable under 35 U.S.C. § 103(a) if the differences between the claimed subject matter and the prior art are such that

the subject matter, as a whole, would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. *KSR Int'l Co. v. Teleflex Inc*., 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations including: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of ordinary skill in the art; and (4) objective evidence of nonobviousness. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966).

The level of ordinary skill in the art is reflected by the prior art of record. *See Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001); *In re GPAC Inc*., 57 F.3d 1573, 1579 (Fed. Cir. 1995); *In re Oelrich*, 579 F.2d 86, 91 (CCPA 1978).

*D. Anticipation based on Burge*

Liberty asserts that claims 1-78 are unpatentable under 35 U.S.C. § 102 as anticipated by Burge. Pet. 22-77. In support of that asserted ground of unpatentability, Liberty provides detailed explanations as to how each claim element, arranged as is recited in these claims, is disclosed by Burge. *Id*. Liberty's petition also relies on the declaration testimony of Ms. Mary L. O'Neil and Mr. Scott Andrews. Exs. 1010 and 1014.

Upon review of Liberty's petition, Progressive's response, and Liberty's reply, we determine that Liberty has demonstrated, by a preponderance of the evidence, that claims 1-78 are unpatentable under 35 U.S.C. § 102 as being anticipated by Burge.

Burge

Burge relates to a system that uses operating data from vehicle sensors to determine the cost of automobile insurance. Ex. 1003 ¶ 2. Figure 1 of Burge, reproduced below, depicts an overall system of Burge:

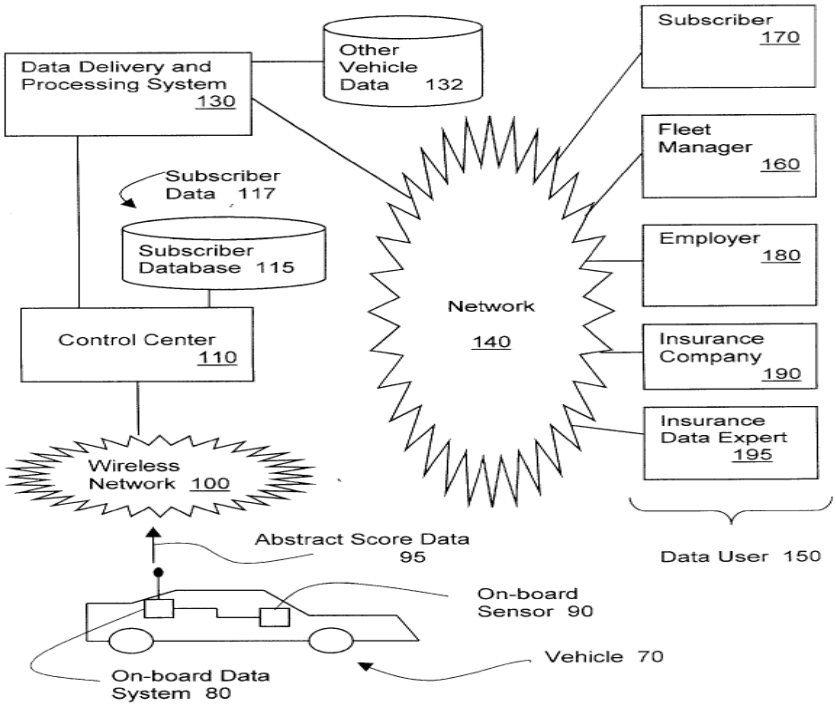



FIG. 1

As illustrated in Figure 1 of Burge, onboard sensors 90 shown within vehicle 70 generate onboard vehicle data that represent operating characteristics of the vehicle such as speeds, vehicle locations, and usage. *Id*. at ¶ 112. The onboard vehicle data are processed by onboard data system 80 into abstract score data 95 (e.g., average speed, total miles driven, and acceleration/deceleration profile). *Id*. at ¶¶ 113, 115. Onboard data system 80 has a wireless communication system connected to wireless network 100 that is capable of transmitting data. *Id*. at ¶ 114.

Abstract score data 95 may be transmitted through wireless network 100 to control center 110. *Id*. at ¶ 115. Control center 110 includes subscriber database 115, that contains subscriber data including information about the individuals and vehicles being provided services by the control center. *Id*.

Control center 110 is connected to the data delivery and processing system 130 ("Data D&PS"), that enables vehicle owners to use the data to analyze their risk or to provide information to insurance companies that may enable more accurate insurance rates. *Id*. at ¶ 144. Data D&PS 130 performs functions such as analyzing and scoring abstract score data 95 to determine the safety risk of a subscriber or vehicle, and provides a mechanism for subscribers to obtain automobile insurance quotes from insurance companies. *Id*. at ¶ 146.

Discussion

We have reviewed the parties' arguments and supporting evidence, and determine that the explanations and supporting evidence provided by Liberty as to how each element of the challenged claims is described by Burge have merit. In its patent owner response, Progressive maintains that Liberty fails to meet its burden of demonstrating claims 1-78 of the '598 patent are anticipated by Burge. PO Resp. 48-59. Specifically, Progressive argues that Burge fails to disclose certain claim limitations. Progressive's arguments are directed to independent claims 1, 31, 32, 33, 48, and 78, which are of similar scope. As such, Progressive essentially presents the same arguments for each claim. Our analysis will focus on the deficiencies

alleged by Progressive in its patent owner response with regard to the challenged claims.

*a. Server Receiver and Selected Onboard Vehicle Data*

Liberty asserts that Burge discloses a server receiver configured to receive wirelessly selected onboard vehicle data monitored by an in-vehicle data monitoring device, as required by the independent claims of the '598 patent. Pet. 30 (citing Ex. 1003 ¶¶ 112, 113, 115, 172, figs. 1, 3). However, Progressive argues that Burge does not disclose such a server receiver. PO Resp. 48-49. We are not persuaded by Progressive's argument.

As Liberty noted, the onboard vehicle data (e.g., data relating to speeds, amount of use, and braking and turn signal activities) are generated by onboard sensors 90 within vehicle 70. Pet. 30 (citing Ex. 1003 ¶ 112, fig. 1). Burge's onboard data system 80 processes the onboard vehicle data into abstract score data (e.g., average speed, total miles driven, and acceleration/deceleration profile) and transmits abstract score data through wireless network 100 to control center 110 in a remote location. Ex. 1003 ¶¶ 113, 115, fig. 1.

Applying the broadest reasonable interpretation of the claim term "selected onboard vehicle data"—"certain onboard vehicle data" that are not limited to raw data, but include processed or calculated onboard vehicle data—we agree with Liberty's contention that abstract score data 95 (e.g., average speed, total miles driven, and acceleration/deceleration profile) constitute "selected onboard vehicle data." *See* Pet. 30.

Accordingly, Liberty has demonstrated that Burge discloses a server receiver configured to receive wirelessly selected onboard vehicle data, as required by the independent claims of the ’598 patent.

*b. Server Receiver Interface*

Liberty asserts, in its petition, that Burge discloses a network server coupled to a server receiver that provides an interface configured to establish relationships between the selected onboard vehicle data and levels of risk in a usage based insurance system, as recited in the independent claims of the ’598 patent. Pet. 32-33 (citing Ex. 1003 ¶¶ 112, 144, 195, 197; figs. 1, 12a). Progressive, however, maintains that Burge does not disclose a network server system coupled to, or in communication with, a server receiver. PO Resp. 51.

Progressive’s argument is not persuasive. As Liberty points out in its petition, Burge’s Data D&PS 130 (network server system) is *connected to* control center 110 (server receiver). Pet. 32 (citing Ex. 1003 ¶ 144 (“The Control Center 110 is connected to the Data Delivery and Processing System 130 (‘Data D&PS’).”)).

Figure 2 of Burge, reproduced below, shows the onboard data system and the remote system (emphasis added).

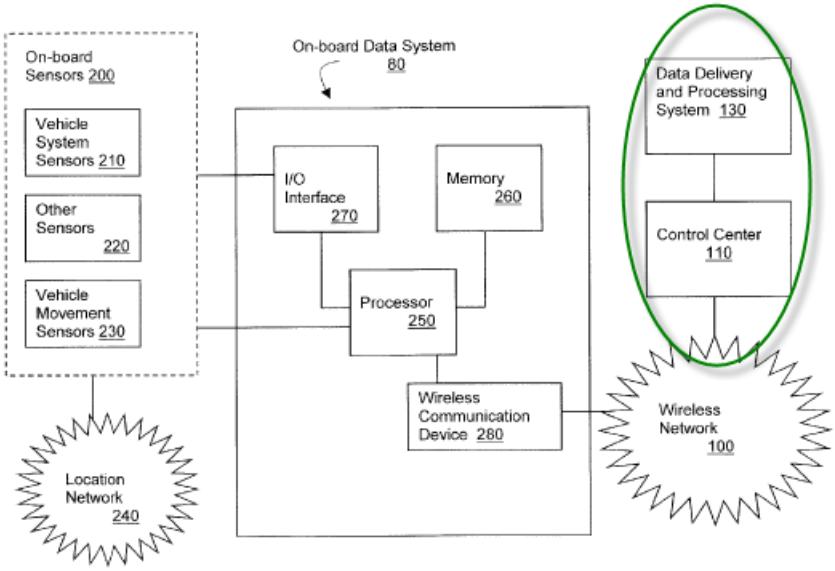



FIG. 2

As illustrated in Figure 2 of Burge, Data D&PS 130 is connected to control center 110. Burge also discloses that one of "the primary functions of the Data D&PS 130 is to enable vehicle owner to make use of [onboard vehicle] data to analyze their risk exposure or to provide information to insurance companies that may enable more accurate insurance rates to be provided." Ex. 1003 ¶ 144. Data D&PS 130 also performs functions such as analyzing and scoring abstract score data 95 to determine the safety risk of a particular subscriber or vehicle, and providing a mechanism for subscribers to obtain automobile insurance quotes from insurance companies. *Id*. at ¶ 146.

Liberty, in its petition, also directs our attention to Figure 12a of Burge, reproduced below:

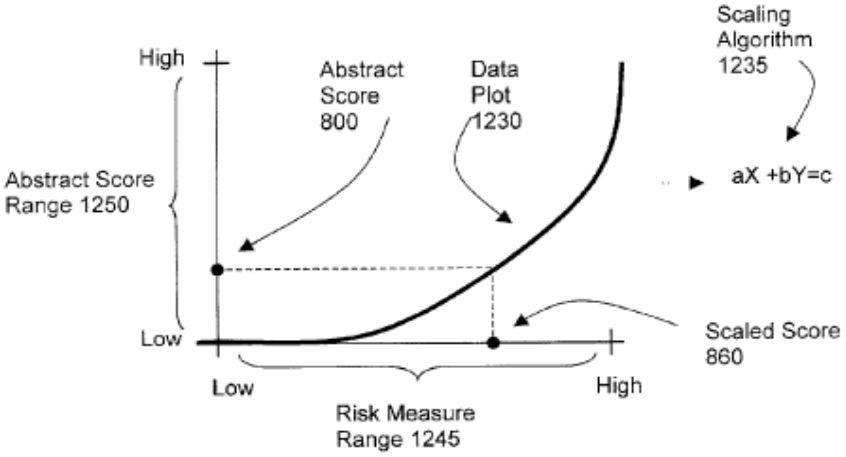



FIG. 12a

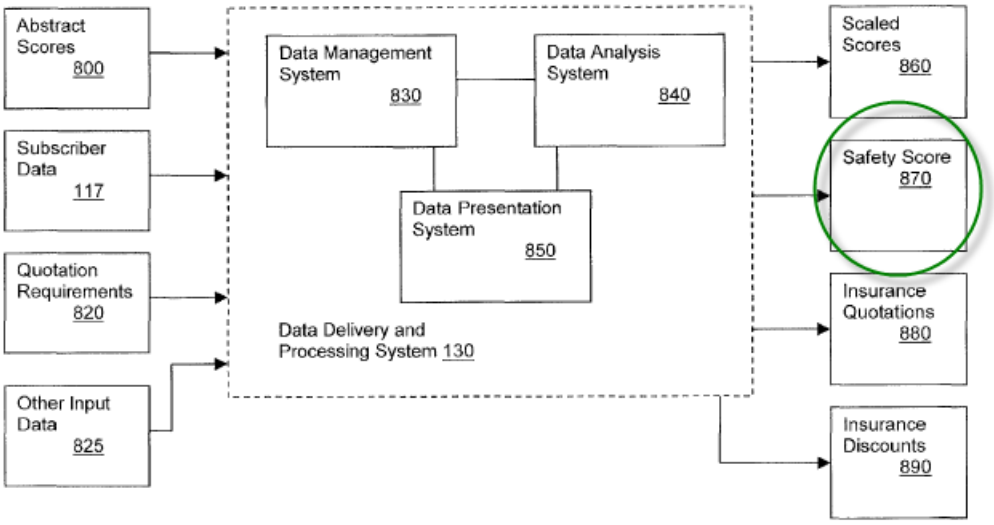
As shown in Figure 12a of Burge, the graph illustrates the relationship between abstract score 800 for a particular operating characteristic and risk measures for that operating characteristic. Ex. 1003 ¶ 197. Risk measures could represent any unit of risk measurement, including accident rates, injury rates, death rates, or insurance claims that are correlated to a particular operating characteristic. *Id.*

Based on the evidence before us, we determine that Liberty has established that Burge discloses a network server system coupled to a server receiver that provides an interface configured to establish relationships between the selected onboard vehicle data and levels of risk in a usage based insurance system, as required by the independent claims of the ’598 patent.

*c. Database, Relationship Data, Interface Module, and Driver Safety Score*

In its petition, Liberty asserts that Burge discloses a database that stores relationship data and an interface module configured to search the database, identify the level of risk, and render a driver safety score, in response to a request from a database user, by using the relationship data and the selected onboard vehicle data, as required by the independent claims of the '598 patent. Pet. 35-39 (citing Ex. 1003 ¶¶ 52, 57, 193, 194, 195, 200, 206, 211, claim 44; figs. 13a, 31; Ex. 1010 ¶¶ 23-25). Progressive counters that Burge does not describe searching a database for a risk assessment of vehicle data and rendering a driver safety score. PO Resp. 56-57.

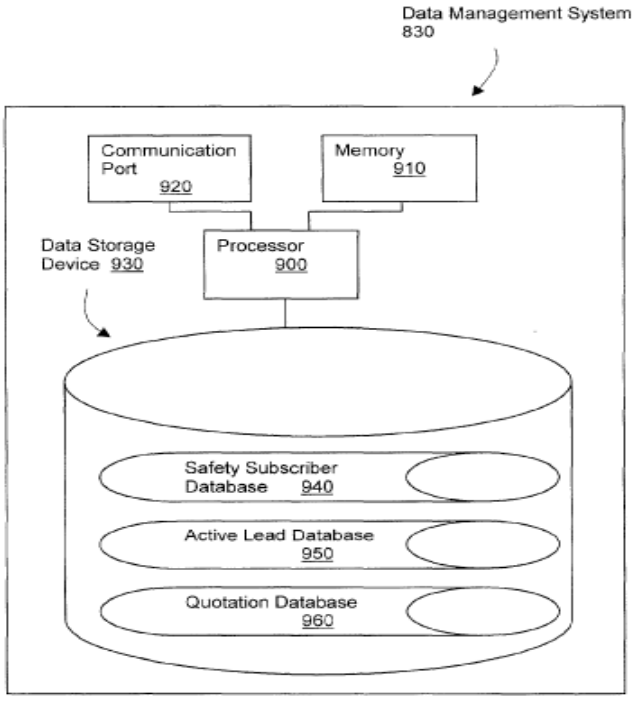
Progressive's arguments are unavailing, as they are not supported by the evidence before us. Figure 8 of Burge, reproduced below, illustrates data inputs and outputs of Data D&PS 130 (emphasis added):




As shown in Figure 8 of Burge, Data D&PS 130 includes data management system 830, data analysis system 840, and data presentation

system 850. Ex. 1003 ¶ 193. Data management system 830 is configured to receive subscriber 117, abstract scores 800, quotation requirement 820, and other input data 825. *Id*. Data analysis system 840 is configured to analyze the aforementioned data items, and to generate scaled scored 860 and *safety scores* 870 for displaying to subscribers 170 and other data users 150 (e.g., fleet manager, employer, insurance company, and insurance data expert) through the data presentation system 850. *Id*. at ¶ 195.

Figure 9a of Burge, reproduced below, depicts data management system 830 that includes a central database server:




As illustrated in Figure 9a of Burge, data storage device 930 contains a variety of databases, including safety subscriber database 940, active lead database 950, and quotation database 960. Ex. 1003 ¶ 194.

As Liberty indicates (Pet. 38-39), Burge discloses:

> The Data Management System 830 includes a Processor 900, communication Port 920, and Memory 910 for managing the operations of the Data Management System 830, including: (1) inputting of new Abstract Score Data; (2) inputting of new subscriber data; (3) management of Data User 150 access; (4) management of subscriber insurance requirements information; (5) *database searches and queries for data analysis by Data Users 150*; (6) management of insurance quotations and denials. FIG. 9b is an overview diagram of the relationship between the Safety Subscriber Database 940 and the Active Lead Database 950. The purpose of the *Safety Subscriber Database 940 is for storage of Subscriber Data 117 and scoring data used to provide Subscribers 170 feedback regarding the safety of their vehicle operating characteristics*, and is primarily used by Subscribers 170. The purpose of the Active Lead Database 950 is for Subscribers 170 to receive insurance quotations, and is primarily used by Insurance Companies 190 *querying the database with their rating and underwriting criteria* or for marketing purposes to specifically request insurance quotations from insurance companies on behalf of individual subscribers.

Ex. 1003 ¶ 194 (emphases added).

Moreover, Burge discloses a scoring system that enables abstracted data to be used to assess the risk exposure of the consumer, and uses off-board risk measure information to convert abstracted data into scaled scores and safety scores that provide a measure of risk exposure. Ex. 1003 ¶ 57. Burge also discloses a system for presenting data allowing for comparison of the relative driving safety risks of drivers. *Id*. at ¶ 52. More specifically, score graph 1600, as shown in Figure 16a of Burge, may

present information based on how the operating characteristics of a subscriber compare to those in a population of subscribers. *Id*. at ¶ 206.

Based on the evidence before us, we conclude that Liberty has demonstrated, by a preponderance of evidence, that Burge describes a searchable database for a risk assessment of vehicle data, and an interface module configured to search the database, identify the level of risk, and render a driver safety score, in response to a request from a database user to quantify driver behavior, by processing the selected onboard vehicle data, as required by the independent claims of the ’598 patent.

*d. Conclusion*

For all of the reasons stated above, we are not persuaded by Progressive’s arguments as to independent claims 1, 31, 32, 33, 48, and 78. Progressive does not address specifically dependent claims 2-30, 34-47, and 49-77. PO Resp. 41-58. Liberty provides sufficient explanations and evidence to show that Burge discloses the additional recited limitations in those claims. Pet. 48-77. For the foregoing reasons, we hold that Liberty has demonstrated, by a preponderance of the evidence that claims 1-78 are anticipated by Burge.

*E. Anticipation based on Nakagawa*

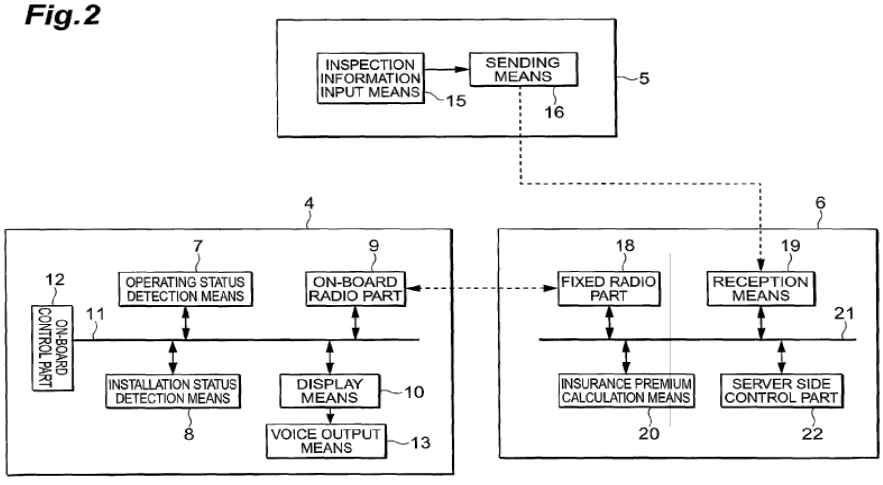
Liberty asserts that claims 1-78 are unpatentable under 35 U.S.C. § 102 as anticipated by Nakagawa. Pet. 22-77. As support, Liberty provides detailed explanations as to how each claim element, arranged as is recited in these claims, is disclosed by Nakagawa. *Id*. Liberty also relies on the declaration testimony of Ms. O'Neil and Mr. Andrews. Exs. 1010 and 1014.

Upon review of Liberty's petition, Progressive's response, and Liberty's reply, we determine that Liberty has demonstrated, by a preponderance of the evidence, that claims 1-78 are unpatentable under 35 U.S.C. § 102 as being anticipated by Nakagawa.

Nakagawa

Nakagawa discloses a system that comprises mechanisms for detecting the usage of vehicles, storing data related to vehicles, and calculating vehicle insurance premiums based on detection results and inputted data. Ex. 1004, Abs. Figure 2 of Nakagawa is reproduced below:

***Fig.2***



As shown in Figure 2 of Nakagawa, the premium calculation system comprises onboard apparatus 4, maintenance data management means 5, and server apparatus 6. *Id*. at ¶ 52. Onboard apparatus 4 comprises operation status detection means 7 and onboard radio part 9 that sends and receives data. *Id*. Server apparatus 6 calculates insurance premiums based on data received from onboard apparatus 4 and maintenance data management means 5. *Id*. at ¶ 61. Display means 10 displays premium discounts, operating levels, and safety levels. *Id*. at ¶¶ 74-76.

Discussion

We have reviewed the parties' arguments and supporting evidence, and determine that the explanations and supporting evidence provided by Liberty as to how each element of the challenged claims is described by Nakagawa have merit. In its patent owner response, Progressive maintains that Liberty fails to meet its burden of demonstrating claims 1-78 of the '598 patent are anticipated by Nakagawa. PO Resp. 48-59. In particular, Progressive argues that Nakagawa does not describe certain claim limitations. Progressive's arguments are directed to independent claims 1, 31, 32, 33, 48, and 78, which are of similar scope. As such, Progressive presents essentially the same arguments for each claim. Our analysis will focus on the deficiencies alleged by Progressive in its patent owner response with regard to the challenged claims.

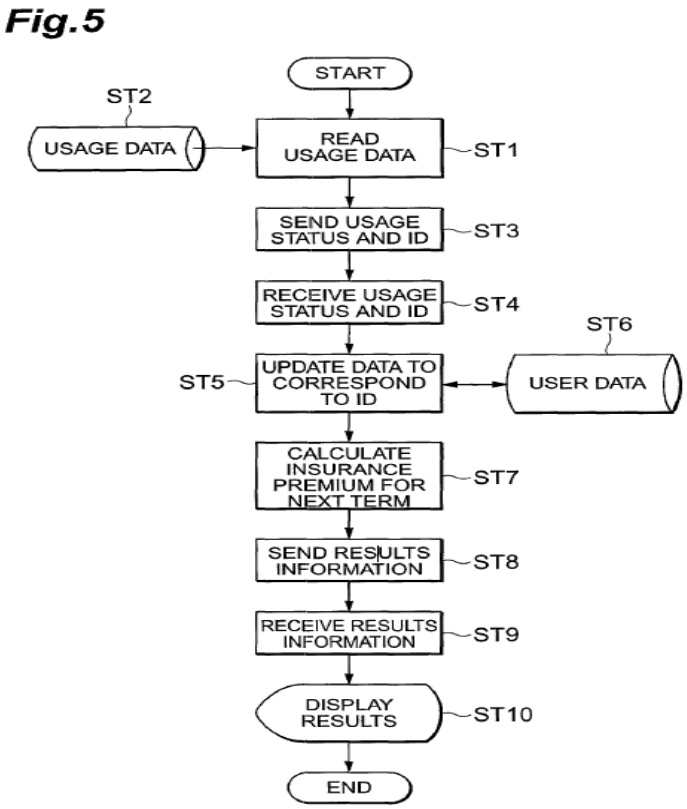
*a. Selected Onboard Vehicle Data*

Liberty asserts that Nakagawa discloses a server receiver configured to receive wirelessly-selected onboard vehicle data monitored by an in-vehicle data monitoring device, as required by the independent claims of the '598 patent. Pet. 30-31 (citing Ex. 1004 ¶¶ 12, 24, 48, fig. 2). However, in its patent owner response, Progressive disagrees and argues that the data, in Nakagawa, obtained from the sensors are processed into *point values* reflecting a degree of safety or danger *before* it is transmitted wirelessly to the server apparatus. PO Resp. 49-50.

Liberty counters that Nakagawa expressly discloses that "detected vehicle data being transmitted to the server without being processed into point values." Reply 12 (citing Ex. 1004 ¶¶ 58, 56; Ex. 1023 ¶¶ 5-6). According to Liberty, Nakagawa discloses that the "user data" received and stored at the server includes onboard vehicle detected data (e.g., data related to speeding, seatbelt usage, acceleration, and deceleration). *Id*. (citing Ex. 1004 ¶ 72; Ex. 1023 ¶ 7). Liberty further asserts that Nakagawa's calculated numeric usage data (e.g., the safety point scores) also satisfy the "selected onboard vehicle data" claim limitation, because they are calculated from raw data collected using onboard vehicle sensors. *Id*. (citing Ex. 1001, 8:35-37; Ex. 1023 ¶¶ 8-9).

We agree with Liberty. Indeed, Nakagawa describes that onboard apparatus 4, as shown in Figure 2 of Nakagawa, has various sensors that collect information related to status of safety equipment, and then sends the collected information to the insurance company via a radio communication.

Ex. 1004 ¶ 48; Figs. 1-2. Figure 5 of Nakagawa, reproduced below, illustrates the steps for calculating insurance premium:




As shown in Figure 5 of Nakagawa, first the usage data is read from the memory in onboard control part 12 (steps ST1 and ST2). Ex. 1004 ¶ 69. Onboard radio part 9 sends the usage data and an identification ("ID") to fixed radio part 18 in server apparatus 6 (step ST3). *Id*. After server apparatus 6 receives the usage data and ID, server-sided control part 22 updates that user data stored in memory that corresponds to the received ID (steps ST5 and ST 6). *Id*. Insurance premium calculation part 20 reads the user data corresponding to the ID from memory in control part 22 on the server side and calculates the insurance premium for the next term (step

ST7). *Id*. at ¶ 70. Nakagawa clearly discloses that the user data (e.g., data related to speeding, seatbelt usage, acceleration and deceleration) are used by insurance premium calculation means 20 to calculate insurance premiums. *Id*. at ¶ 72.

Progressive's argument narrowly focus on only Nakagawa's safety point scores (Ex. 1004 ¶ 65), and fails to consider Nakagawa's disclosure as a whole (*e.g.*, Ex. 1004 ¶¶ 69-73; fig. 5). In any event, applying the broadest reasonable interpretation of the claim term "selected onboard vehicle data"—"certain onboard vehicle data" that are not limited to raw data, but include processed or calculated onboard vehicle data—we agree with Liberty's contention that the safety point scores described in Nakagawa constitute "selected onboard vehicle data." Therefore, for this additional reason, Progressive's argument that Nakagawa does not disclose the "selected onboard vehicle data" limitation is unavailing.

For the foregoing reasons, Liberty has demonstrated that Nakagawa discloses a server receiver configured to receive wirelessly selected onboard vehicle data, as required by the independent claims of the '598 patent.

*b. Server Receiver*

Liberty asserts, in its petition, that Nakagawa discloses a network server coupled to a server receiver that provides an interface module configured to establish relationships between the selected onboard vehicle data and levels of risk in a usage based insurance system, as recited in the independent claims of the '598 patent. Pet. 33-34 (citing Ex. 1004 ¶¶ 50, 61, 69, 70, 72, 76; figs. 2, 7; Ex. 1014 ¶¶ 23, 37). Progressive disagrees and

argues that Nakagawa does not disclose "a network server system coupled to the server receiver" because Liberty relies on Nakagawa's server apparatus 6 to meet both the "server receiver" and the "network server system" features. PO Resp. 52-53.

Liberty counters that Nakagawa discloses, as part of server apparatus 6, a network server system that comprises insurance premium calculation means 20 and server control part 22, that are connected via control bus 21 to fixed radio part 18 and reception means 19 (e.g., server receiver). Reply 12-13 (citing Ex. 1004 ¶ 61, fig. 2; Ex. 1014 ¶ 37). We agree with Liberty, as Progressive merely focuses on server apparatus 6 as one component, and fails to consider the overall system that has multiple interconnected components.

Progressive also contends that Nakagawa's vehicle data is not processed remotely, but rather in onboard apparatus 4 and, therefore, the "insurance premium calculation means" on the server side of Nakagawa does not meet the claim limitation that requires establishing relationships between vehicle data and levels of risk remotely. PO Resp. 52 (citing Ex. 1004 ¶ 65). We are not persuaded, as Progressive's argument erroneously rests on the premise that the safety point scores (Ex. 1004 ¶ 65) are the only onboard vehicle data sent to server apparatus 6, and that they are not selected onboard vehicle data. As articulated above, we did not find that argument persuasive.

Moreover, as Liberty explains in its petition, Nakagawa's insurance premium calculation means 20 calculates premiums by discounting or

increasing them, using user data (e.g., data related to speed, seatbelt usage, acceleration, and deceleration) and prescribed values as a standard. Pet. 33-34 (citing Ex. 1004 ¶¶ 69-70, 72, 76, figs. 5, 7). For example, the premium increases if the user data reflects unsafe driving behavior (e.g., speeding, non-use or inappropriate use of seatbelts, or sudden acceleration or deceleration). Ex. 1004 ¶ 72. On the other hand, the premium is discounted if the user data reflects safe driving behavior (e.g., driving within the speed limit, appropriate use of seatbelts). *Id*. Once insurance premium calculated means 20 has calculated the premium, fixed radio part 18 sends, by radio, the data relating to the calculated premium to onboard apparatus 4 (step ST8 of Figure 5). *Id*. ¶ 73.

We observe that Nakagawa also discloses "relationship data" indicating relationship between levels of risk and the selected onboard vehicle data. As discussed in the claim construction section, the term "a level of risk" does not require a level of risk to be "assigned based at least in part on the indicated level of willingness of the driver to allow at least one aspect to be recorded." A cost of insurance is one metric for identifying a level of risk for an operator, if the cost of insurance is determined based on the usage of the vehicle, as disclosed here in Nakagawa. Notably, Figure 6 of Nakagawa, reproduced in the next section, shows a screen that displays, to the user, pass rates for each safety item used in the vehicle and insurance premium discount is estimated based on those pass rates. And Figure 7 of Nakagawa, also displays a screen showing, to the user, user operating levels and premium discounts rates based on driving operational data.

In that connection, Liberty's expert, Mr. Andrews explains that

> Nakagawa further discloses a server apparatus 6 (*see e.g.*, Fig. 2) that includes a fixed radio part 18 (server receiver) that provides an interface to server side control part 22 and insurance premium calculation means 20. This interface is configured, as described in Fig. 5, to determine insurance premiums based on the *relationship between the usage data (onboard vehicle data) and data relating to "safe" and "unsafe" driving related behavior* that correspond to increases or decreases in risk and premiums, such as "speeding . . . , non-use or inappropriate use of seatbelts, application of ABS other than during an accident, [or] sudden acceleration and deceleration" (levels of risk). *Id.* at ¶¶ [0050], [0069]-[0072], [0076].

Ex. 1014 ¶ 37 (emphasis added).

We credit Mr. Andrews's testimony, as it is consistent with the disclosure of Nakagawa (Ex. 1004 ¶¶ 69-70, 72, 76, figs. 5-7). Based on the evidence before us, we determine that Liberty has established that Nakagawa discloses a network server system coupled to the server receiver that provides an interface configured to establish relationships between the selected onboard vehicle data and levels of risk in a usage based insurance system, as required by the independent claims of the '598 patent.

*c. Database, Relationship Data, and Interface Module*

In its petition, Liberty asserts that Nakagawa discloses a database that stores relationship data and an interface module configured to search the database and identify the level of risk, in response to a request from a database user, by using the relationship data and the selected onboard vehicle data, as required by the independent claims of the '598 patent.

Pet. 33-41 (citing Ex. 1004 ¶¶ 50, 61, 69, 70, 72, 76, 92, figs. 2, 5, 7, 10; Ex. 1010 ¶¶ 23-25; Ex. 1014 ¶¶ 22, 25, 35).

However, Progressive argues that Nakagawa fails to disclose a database and storing "relationship data" in a database. PO Resp. 54. Progressive also contends that Nakagawa describes storing "user data" in a memory, and a person with ordinary skill in the art would not have found a database to be necessarily present in Nakagawa because not all telematics systems store data in databases. *Id*. Progressive further maintains that Nakagawa does not disclose that data is searchable for a risk assessment of vehicle data, as the onboard vehicle data is assessed for safety in the onboard apparatus rather than in the server apparatus. *Id*. at 55-56.

Liberty counters that Nakagawa discloses storing "relationship data" in a searchable database. Reply 13-14. Accordingly to Liberty, for the data of a particular user (e.g., data related to speeding) to be recorded in memory in a way that can be located and retrieved later (e.g., to update or calculate with a particular piece of data), they must be stored in a database maintaining the link to user ID. *Id*. at 13 (citing Ex. 1023 ¶¶ 10-14). Liberty also asserts that the "user data" stored in the database include "data indicating the relationship established between vehicle data and levels of risk that correspond to changes in risk and premiums" (e.g., speeding or driving within the speed limit). *Id*. (citing Ex. 1004 ¶ 72). Liberty further submits that "[u]pdating stored 'user data' corresponding to a received user ID and evaluating that user's risk and premiums, as later displayed . . . , necessarily requires searching the database for a risk assessment." *Id*. at

13-14 (citing Ex. 1023 ¶ 15). We agree with Liberty as its position is supported by the disclosure of Nakagawa and the evidence on record.

Nakagawa's control part 22 on the server side is equipped with memory and the data relating to car insurance subscribers is *stored in the memory as "user data."* Ex. 1004 ¶ 61. When onboard radio part 9 sends the selected onboard vehicle data and an ID that corresponding to the particular user to Nakagawa's server apparatus 6, control part 22 ***updates*** *the "user data" stored in memory* that corresponds to the received ID. *Id*. at ¶ 69. As stated in Nakagawa, the latest data collected in onboard apparatus 4 and the latest data collected at contract repair factory 3 are stored in the memory of control part 22 as "user data." *Id*. Further, insurance premium calculation part 20 ***reads*** the "user data" (e.g., speeding) corresponding to the particular ID from the memory in control part 22 to calculate the insurance premium increases or discounts for the user associated with the particular ID. *Id*. at ¶¶ 70, 72.

In that regard, Liberty's expert, Mr. Andrews testifies:

> Nakagawa also describes updating the driver's usage data stored in the server's memory that corresponds to the ID. *Id. These data are thus stored so as to create a correspondence between a driver's stored "usage data" and an ID*. Such a correspondence would be understood by one skilled in the art as indicating a database. A person of ordinary skill in the art would understand that such a database is inherently searchable to permit pertinent data to be retrieved.

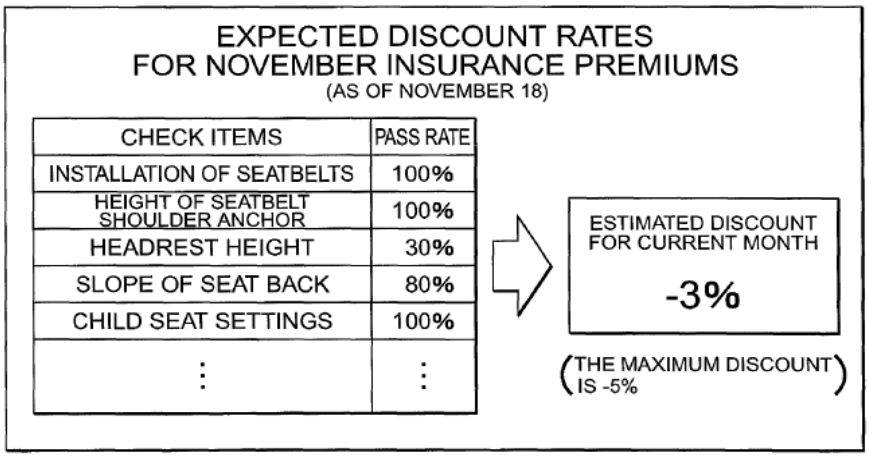
Ex. 1014 ¶ 35 (emphasis added). We credit Mr. Andrew's testimony as it is supported by the disclosure of Nakagawa (*see, e.g.*, Ex. 1004 ¶¶ 61, 69, 71,

72). As indicated above in the claim construction section, the claim term "database" means "a memory in which the stored data are searchable by the content of a particular field in the data entries stored therein." Because the data entries corresponding to particular User IDs have to be ***updated and read*** later, it is logical and persuasive that the User IDs have to be stored, that a link has to be maintained between each data entry and its corresponding User ID, and that the entries are searchable by User ID. Because of the presence of a link between each User ID and the data corresponding to that User ID, each data entry item has a field, the content of which is the User ID, which represents a name for the corresponding data entry. Progressive does not explain sufficient why a link need not be maintained between each User ID and the corresponding user data, such that each data entry item includes a field containing the corresponding User ID by which the data entry is searchable. Therefore, Liberty has demonstrated, not by principles of inherent disclosure, but direct disclosure, that Nakagawa's memory in control part 22 on the *server side* discloses a *searchable database.*

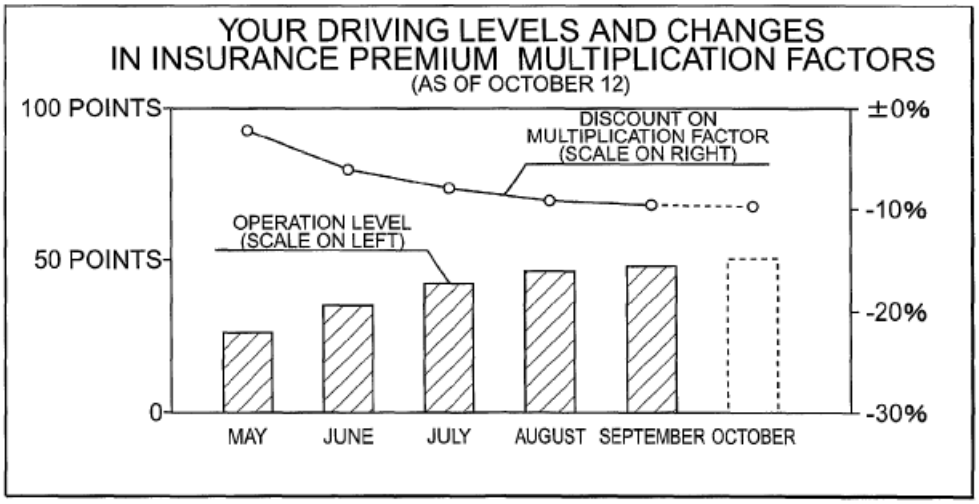
Further, Mr. Andrews explains that the "user data" stored in the database include "data indicating the relationship established between vehicle data and levels of risk that correspond to changes in risk and premiums," (e.g., excessive speeding or driving with in the speed limit). Ex. 1023 ¶ 14 (citing Ex. 1004 ¶ 72). We are persuaded by Mr. Andrews's testimony, as it is consistent with the disclosure of Nakagawa. As discussed above, "a level of risk" does not require a level of risk to be "assigned based

at least in part on the indicated level of willingness of the driver to allow at least one aspect to be recorded." A cost of insurance is one metric for identifying a level of risk for an operator, if the cost of insurance is determined based on the usage of the vehicle, as disclosed here in Nakagawa.

Indeed, Figure 6 of Nakagawa, reproduced below, illustrates a premium discount calculated based on the selected vehicle data:




As illustrated in Figure 6 of Nakagawa, the screen displays pass rates for each safety item used in the vehicle, and an insurance premium discount is estimated based on those pass rates. Ex. 1004 ¶ 74. Further, Figure 7 of Nakagawa, reproduced below, shows user operating levels and discount rates for insurance premiums based on driving operational data:




As depicted in Figure 7 of Nakagawa, the evaluation of operating levels is calculated in numeric form and displayed to reflect the amount by which the premium will be multiplied. Ex. 1004 ¶ 76. The operating levels show driving techniques and the level of safe driving as points which are than evaluated as numbers. *Id*. The operating level of each month is displayed as bar graph to show operating improvements. *Id*. Nakagawa also discloses that the insurance premium can be calculated in real-time as the data collected from onboard apparatus 4 changes. Ex. 1004 ¶ 71. By calculating the insurance premium in real-time, the system enables the user to understand that increases are applied to insurance premiums when unsafe driving occurs, and that discounts apply when safety equipment is properly installed and utilized. Ex. 1004 ¶ 77.

For the foregoing reasons, Liberty has demonstrated, by a preponderance of evidence, that Nakagawa describes a searchable database for a risk assessment of vehicle data that stores "relationship data" indicating relationships between relative levels of risk and the selected onboard vehicle

data, and an interface module configured to search the database to identify the level of risk, as required by the independent claims of the '598 patent.

*d. Driver Safety Score*

Liberty asserts, in its petition, that Nakagawa discloses an interface module configured to render a driver safety score, in response to a request to quantify driver behavior, by processing the selected onboard vehicle data, as required by the independent claims. Pet. 39-41 (citing Ex. 1004 ¶¶ 50, 69, 72, 76, 92, figs. 2, 5, 7, 10; Ex. 1014 ¶¶ 22, 25, 35). In its patent owner response, Progressive, however, argues that Nakagawa's operating levels are calculated in onboard apparatus 4, rather than in a server side "interface module." PO Resp. 56-58 (citing Ex. 1004 ¶ 65).

Liberty counters that Nakagawa discloses an interface at the remote server configured to generate a driver safety score. Reply. 14 (citing Ex. 1004 ¶ 76; fig. 7). In particular, Liberty submits that Nakagawa's server analyzes usage data via an interface to determine total monthly operating levels and premium. *Id*. at 14-15 (citing Ex. 1004 ¶ 76; fig. 7; Ex. 1023 ¶¶ 16-21). Liberty further asserts that the data sent by the server and displayed in the vehicle contains an "evaluation of operating level for one month [that] is calculated in number form and displayed to reflect the amount by which the insurance premium will be multiplied." *Id*.

We are not persuaded by Progressive's argument, as it narrowly focuses on Nakagawa's safety point scores (Ex. 1004 ¶ 65), and fails to consider Nakagawa's disclosure as a whole (*e.g.*, Ex. 1004 ¶¶ 69-73, 76;

figs. 6-7). Rather, we agree with Liberty, as its position is supported by Nakagawa's disclosure.

Nakagawa's "user data" are stored in control part 22 on the server side. Ex. 1004 ¶ 61. When onboard radio part 9 sends the usage data and an ID to server apparatus 6, control part 22 on the server side updates the "user data" stored in the memory that corresponds to the received ID. *Id*. at ¶ 69. That is, the latest data collected are stored in control part 22 on the server side as "user data." *Id*.

There is no dispute that insurance premium calculation means 20, on the server side, calculates insurance premium based on the user data (e.g., data relating to speeding, seatbelt usage, acceleration and deceleration). Ex. 1004 ¶¶ 70, 72. Fixed radio part 18, on the server side, sends the data relating to the calculated insurance premium to onboard apparatus 4, which displays the data to the user. *Id*. at ¶ 73. Figures 6 and 7 of Nakagawa, reproduced above in the previous section, show examples of screen displays.

Both parties agree that the broadest reasonable interpretation of the claim term "driver safety score" is "a *calculated* insurance risk value associated with driver safety." Pet. 21; PO Resp. 10. Applying that construction, the claim term "driver safety score" reads on Nakagawa's operation level points. Ex. 1004 ¶ 76. As shown in Figure 7 of Nakagawa, user operating levels and discounts rates for insurance premiums over previous months are shown in graph form based on data relating to the driving operation of the car. *Id*. The operating levels show driving

techniques and the level of safe driving as points, and they are calculated for each month in numeric form. *Id*.

Based on the evidence before us, Liberty has demonstrated, by a preponderance of evidence, that Nakagawa describes an interface module that quantifies driver behavior by processing onboard vehicle data to render a driver safety score, as required by the independent claims of the '598 patent.

*e. Conclusion*

For all of the reasons stated above, we are not persuaded by Progressive's arguments as to independent claims 1, 31, 32, 33, 48, and 78. Progressive does not address specifically dependent claims 2-30, 34-47, and 49-77. PO Resp. 41-58. Liberty provides sufficient explanations and evidence to show that Nakagawa discloses the additional recited limitations in those claims. Pet. 48-77. For the foregoing reasons, we hold that Liberty has demonstrated, by a preponderance of the evidence, that claims 1-78 are anticipated by Nakagawa.

### *F. Obviousness Grounds of Unpatentability*

Liberty asserts that claims 16, 17, 63, and 64 are unpatentable under 35 U.S.C. § 103(a) over Burge and Herrod, and claim 47 is unpatentable over Nakagawa and Herrod. Pet. 22-26, 56-57, 76. Liberty provides sufficient explanations and evidence to demonstrate that the combination of Burge and Herrod would have rendered the claimed subject matter in recited claims 16, 17, 63, and 64 obvious to one with ordinary skill in the art, and

that the combination of Nakagawa and Herrod would have rendered the claimed subject matter recited in claim 47 obvious to one with ordinary skill in the art. *Id*.

Progressive relies upon the same arguments presented with respect to the anticipation grounds of unpatentability based on either Burge or Nakagawa. PO Resp. 58-60. We have addressed those arguments and determined that they are not persuasive.

For same reasons discussed above, we hold that claims 16, 17, 63, and 64 are unpatentable under 35 U.S.C. § 103(a) over Burge and Herrod, and claim 47 is unpatentable over Nakagawa and Herrod.

### *G. Liberty's Motion to Exclude*

Liberty seeks to exclude the following evidence: (1) the declaration of Mr. Zatkovich (Ex. 2013 ¶¶ 10-71); (2) the declaration of Mr. Miller (Ex. 2011 ¶ 15); and (3) the supplemental declaration of Mr. Miller (Ex. 2017 ¶¶ 2-5). Paper 36 ("Pet. Mot.").

Liberty contends that Mr. Zatkovich lacks "the necessary scientific, technical, or other specialized knowledge on insurance and telematics issues pertinent to the '598 patent to provide testimony on those subjects." Pet. Mot. 5. In particular, Liberty asserts that Mr. Zatkovich has no basis to render opinions regarding the understanding of a person with ordinary skill in the art as to insurance matters, because Mr. Zatkovich does not purport to be a person with ordinary skill in the art. *Id*. Liberty also argues that Mr. Zatkovich has no experience in telematics, as of January 1996, the

earliest effective filing date claimed by the '598 patent. *Id*. at 5-6. Pursuant to the Federal Rule of Evidence 702,[5] Liberty alleges that Mr. Zatkovich "is not sufficiently knowledgeable about insurance matter or telematics matters as of 1996." *Id*. at 6.

We disagree with Liberty that Mr. Zatkovich must be qualified both in the field of insurance and in the field of vehicle telematics to give reliable testimony in this proceeding. It is only the "hypothetical" person of ordinary skill in the art who possesses ordinary skill in each of the fields involved in a claimed invention. *In re GPAC*, 57 F.3d 1573, 1579 (Fed. Cir. 1995) ("The person of ordinary skill in the art is a hypothetical person who is presumed to know the relevant prior art."). The qualifications of Mr. Zatkovich, as summarized in his curriculum vitae (Ex. 2014), qualify him to give expert testimony on the subject of vehicle telematics, computer systems, and network communications. With regard to Mr. Zatkovich's alleged lack of

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[5] With some enumerated exceptions, the Federal Rules of Evidence apply to covered business method patent review. 37 C.F.R. § 42.62.

The Federal Rule of Evidence 702 entitled "Testimony by Experts" states:

> If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.

ordinary skill on the specific subject of insurance, the Board weighs his testimony accordingly, taking into account the limited extent of his expertise.

We also disagree that Mr. Zatkovich's technical experience must have been acquired prior to January 1996. Under the Federal Rule of Evidence 702, a witness who is qualified as an expert by knowledge, skill, experience, training or education may testify in the form of an opinion. Liberty has not shown that Rule 702 of the Federal Rules of Evidence requires the witness to have particular experience with the specific subject matter of the '598 patent, or requires the relevant experience of the witness to have been acquired during the January 1996 time-frame.

As to the declarations of Mr. Miller (Ex. 2011 ¶ 15; Ex. 2017 ¶¶ 2-5), Liberty argues that Mr. Miller in his declaration (Ex. 2011 ¶ 15) referred to a publication titled "Risk Classification Statement of Principles," published by the American Academy of Actuaries in 1980, but Progressive did not provide timely a copy of the publication to Liberty.

Instead, in response to Liberty's objection, Progressive filed a supplemental declaration of Mr. Miller (Ex. 2017 ¶¶ 2-5) that indicates the following: (1) that Mr. Miller was a member of the American Academy of Actuaries from 1975 to 2010; (2) that Exhibit 2012 in CBM2012-00002 is a true and correct copy of a publication titled "Risk Classification Statement of Principles," published by the American Academy of Actuaries in 1980; (3) that Exhibit 2012 in CBM2012-00002 is widely accepted and followed by members of the actuarial profession; and (4) that Exhibit 2012 in

CBM2012-00002 is the same publication referred to in Mr. Miller's declaration (Ex. 2011 ¶ 15).

Progressive ultimately filed and served a copy of the publication at issue, as Exhibit 2023, together with its opposition to Liberty's motion to exclude evidence. Progressive should have served a copy of the publication at the time it filed the patent owner response, or at the time it filed the supplemental declaration of Mr. Miller, and not waited until the time of its opposition to Liberty's motion to exclude evidence. Under 37 C.F.R. § 41.51(b)(1)(i), "[u]nless previously served or otherwise by agreement of the parties, any exhibit cited in a paper or in testimony must be served with the citing paper or testimony." The wording "previously served" in 37 C.F.R. § 41.51(b)(1)(i) is construed to mean within the same proceeding before the Board, and does not cover related proceedings.

Liberty does not dispute that, prior to the filing of the patent owner response, Progressive had served Liberty, in related proceeding CBM2012-00002, a copy of Exhibit 2012 in CBM2012-00002. Liberty also does not dispute that Exhibit 2012 in CBM2012-00002 is the publication referenced in Mr. Miller's declaration (Ex. 2005 ¶ 15). Given that Progressive, through the supplemental declaration of Mr. Miller, informed Liberty that the publication at issue is the same as Exhibit 2012 in CBM2012-00002, there is no prejudice to Liberty for not having been served with the publication at the time of Progressive filed its patent owner response. Under the totality of these circumstances, we decline to exclude the testimony of Mr. Miller.

Accordingly, Liberty's motion to exclude is *denied*.

*H. Progressive's Motion to Exclude*

Progressive seeks to exclude certain evidence submitted in support of Liberty's reply. Paper 39 ("PO Mot."). Liberty opposes Progressive's motion to exclude. Paper 43 ("Opp."). As the movant, Progressive has the burden of proof to establish that it is entitled to the requested relief. *See* 37 C.F.R. § 42.20(c). For the reasons stated below, Progressive's motion is *denied*.

A motion to exclude must explain why the evidence is not admissible (e.g., relevance or hearsay), but may not be used to challenge the sufficiency of the evidence to prove a particular fact. Office Patent Trial Practice Guide, 77 Fed. Reg. 48,765, 48,767 (Aug. 14, 2012). While a motion to exclude may raise issues related to admissibility of evidence, it is not an opportunity to file a sur-reply, and also is not a mechanism to argue that a reply contains new arguments or relies on evidence necessary to make out a prima facie case. Here, Progressive's motion to exclude contains such improper arguments, and is in the nature of a sur-reply. PO Mot. 1-9. Moreover, as discussed below, Progressive's arguments also are without merit.

*1. New issues as to the claimed "level of risk"*

Progressive seeks to exclude Ms. O'Neil's rebuttal declaration (Ex. 1026). PO Mot. 4. Progressive asserts that Ms. O'Neil's testimony includes new arguments and constitutes new evidence that should have been submitted with Liberty's petition. *Id*. at 4-5.

Liberty opposes and argues that Ms. O'Neil's rebuttal declaration was submitted properly to respond to Progressive's arguments that Burge and Nakagawa fail to disclose the claimed "level of risk." Opp. 3-4. Liberty points out that Progressive affirmatively asserted, in its patent owner response, that "neither Burge nor Nakagawa discloses this 'level of risk' as construed by the Board." *Id*. (citing PO Resp. 26, 33, 51 n.9, 57).

Having considered the parties' arguments and supporting evidence, we are not persuaded by Progressive's arguments. Contrary to Progressive assertion that it was merely arguing that Liberty failed to offer adequate evidence in its petition to establish that Burge and Nakagawa disclose the claimed "level of risk" (PO Mot 4-5), Progressive, in its patent owner response, affirmatively argue that neither reference discloses the claimed level of risk (PO Resp. 26, 33, 51 n.9, 57). Therefore, we agree with Liberty that Ms. O'Neil's rebuttal declaration (Ex. 1026) was submitted properly to rebut Progressive's argument made in its patent owner response (PO Resp. 26, 33, 51 n.9, 57). Progressive has not demonstrated that Ms. O'Neil's rebuttal declaration exceeds the proper scope of reply evidence. Accordingly, we are not persuaded by Progressive's argument that Ms. O'Neil's rebuttal declaration (Ex. 1026) should be excluded.

*2. New issues as to claimed "database"*

Progressive seeks to exclude the rebuttal declaration of Mr. Andrews (Ex. 1023) as new evidence that should have been submitted with the petition. PO Mot. 5-7. Progressive argues that Liberty submitted no

testimonial evidence with its petition that Nakagawa inherently disclosed a "database," and Mr. Andrews in its rebuttal declaration advanced a new argument on inherency by testifying that "Nakagawa's user data [are] necessarily stored in a database." *Id*. (citing Ex. 1023 ¶ 12).

Liberty opposes and argues that the rebuttal declaration of Mr. Andrews was filed properly to rebut Progressive's argument made in its patent owner response that Nakagawa did not disclose a "database" (PO Resp. 54). Opp. 6-8. We agree with Liberty.

As Liberty points out, its petition asserted that a person of ordinary skill in the art "would have recognized that Nakagawa's disclosure 'explicitly . . . or at a minimum inherently' discloses a database." Opp. 6. In support of Liberty's position, Mr. Andrews testified, in his initial declaration filed with the petition, that Nakagawa's disclosure would have been "understood by one skilled in the art as indicating a database" and "[a] person of ordinary skill in the art would understand that such a database is *inherently* searchable to permit pertinent data to be retrieved." Ex. 1014 ¶ 35 (emphasis added).

In its patent owner response, Progressive argues that Nakagawa does not disclose the "database" limitation based on the premise that Nakagawa's "onboard vehicle data is processed in the onboard apparatus 4 into points reflecting the degree of safety or danger it represents." PO Resp. 54; *see also id*. at 49. The rebuttal declaration of Mr. Andrews (Ex. 1023), which explains that the "user data" is stored in the memory provided inside control part 22 on the server side, was filed properly to rebut Progressive's argument

made in the patent owner response (PO Resp. 54; *see also id*. at 49). Progressive has not demonstrated that the rebuttal declaration of Mr. Andrews exceeds the proper scope of reply evidence. Accordingly, we are not persuaded by Progressive's argument that the rebuttal declaration of Mr. Andrews (Ex. 1023) should be excluded.

*3. Belatedly-introduced issues as to priority*

Progressive seeks to exclude the rebuttal declarations of Mr. Andrews and Ms. O'Neil (1023 ¶¶ 31-33, 35; 1026 ¶¶ 35-38). PO Mot. 7-8. Progressive argues that neither of Liberty's expert offered any declaration to support Liberty's priority arguments with the petition and, therefore, the rebuttal declarations attempted to introduce such support should be excluded. *Id*.

Liberty opposes and argues that the rebuttal testimony was submitted properly to rebut Progressive's inherency argument (PO Resp. 6, 33, 37, 39). Opp. 8-9. We are not persuaded by Progressive's argument that the declarations should be excluded. As explained by Liberty, its experts responded to the inherency arguments made in the patent owner response "by demonstrating that a [person with ordinary skill in the art] would not have understood, at the time the '650 application was filed, that the disclosures identified by Progressive in its [patent owner response] necessarily required each of the missing claim limitations." Opp. 9 (citing Ex. 1023 ¶¶ 31-33, 35; Ex. 1026 ¶¶ 35-38).

Therefore, we agree with Liberty that its experts' rebuttal declarations (Ex. 1023 ¶¶ 31-33, 35; Ex. 1026 ¶¶ 35-38) were submitted properly to rebut Progressive's inherency arguments made in the patent owner response (PO Resp. 6, 33, 37, 39). Progressive has not demonstrated that the rebuttal declarations exceed the proper scope of reply evidence. Accordingly, we are not persuaded by Progressive's argument that the rebuttal declarations of Mr. Andrews and Ms. O'Neil should be excluded.

*4. Reliability of evidence*

Progressive seeks to exclude Ms. O'Neil's rebuttal declaration concerning the testimony of Progressive expert, Mr. Miller, as unreliable, pursuant to Federal Rule of Evidence 702. PO Mot. 8-9 (citing Ex. 1026 ¶ 8, 16, 35). Progressive argues that Ms. O'Neil's declaration "mischaracterizes" Mr. Miller's declaration as requiring *actual* claims loss data to generate actuarial classes. *Id.* In support of its arguments, Progressive notes that Mr. Miller's declaration does not use the phrase "*actual* claims data," and that the Statement of Principles cited by Mr. Miller (Ex. 2011 ¶ 15) makes it clear that actuarial classification may be based on data other than *actual* claims loss data. Mot. 9. Progressive further submits that Ms. O'Neil attempted to discredit Mr. Miller's opinion with regard to the term "rating factor." PO Mot. 10.

The reasoning articulated by Progressive is insufficient to have Ms. O'Neil's testimony excluded as unreliable. The Board is capable of taking into account the baselessness of a witness's testimony, if any, when

weighing all of the testimony of the witness. We agree with Liberty that "the Board, sitting as a non-jury tribunal with administrative expertise, is well-positioned to determine and assign appropriate weight to the evidence presented in this trial, without resorting to formal exclusion that might later be held reversible error." Mot. 1 (citing *e.g., S.E.C. v. Guenthner*, 395 F. Supp. 2d 835, 842 n.3 (D. Neb. 2005)). There is a strong public policy for making all information filed in a quasi-judicial administrative proceeding available to the public, especially in a covered business method patent review, which determines the patentability of claims in an issued patent. To that end, we generally will exercise our discretion to accord evidence the appropriate weight, if any, rather than exclude particular pieces of evidence. *See, e.g., Donnelly Garment Co. v. NLRB*, 123 F.2d 215, 224 (8th Cir. 1942) ("One who is capable of ruling accurately upon the admissibility of evidence is equally capable of sifting it accurately after it has been received.").

For the foregoing reasons, we are not persuaded by Progressive's argument that Ms. O'Neil's testimony (citing Ex. 1026 ¶ 8, 16, 35) should be excluded.

## III. CONCLUSION

Liberty has met its burden of proof, by a preponderance of the evidence, in showing that claims 1-78 of the '598 patent are unpatentable based on the following grounds of unpatentability:

A. Claims 1-78 are unpatentable under 35 U.S.C. § 102 as being anticipated by Burge;

B. Claims 1-78 are unpatentable under 35 U.S.C. § 102 as being anticipated by Nakagawa;

C. Claims 16, 17, 63, and 64 are unpatentable under 35 U.S.C. § 103(a) over Burge in view of Herrod; and

D. Claim 47 is unpatentable under 35 U.S.C. § 103(a) over Nakagawa in view of Herrod.

## IV. ORDER

In consideration of the foregoing, it is

ORDERED that claims 1-78 of the '598 patent are held unpatentable;

FURTHER ORDERED that Liberty's Motion to Exclude Evidence is *denied*;

FURTHER ORDERED that Progressive's Motion to Exclude Evidence is *denied*; and

FURTHER ORDERED that because this is a final written decision, parties to the proceeding seeking judicial review of the decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

Case CBM2013-00004
Patent 8,090,598

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