

**EXHIBIT FO: Invalidity Chart for the Asserted Patents
Based on Various References that Render the Claimed Inventions Obvious**

Obviousness Claim Chart for U.S. Patent No. 7,936,738 ('738)

In combination with other references charted separately and/or in combination with the knowledge of a person of ordinary skill, the following prior art references render obvious claims 1-6, 10, and 33 ("Asserted Claims") of the '738 patent under 35 U.S.C. § 103 prior art references. These combinations render obvious the Asserted Claims of the '738 patent as those claims have been applied by Valtrus in its Infringement Contentions and/or under SAP's understanding of the proper construction of the claims.

Nothing stated herein shall be treated as an admission or suggestion that SAP agrees with Valtrus regarding either the scope of any of the Asserted Claims or the claim constructions advanced by Valtrus in its Infringement Contentions or anywhere else, or that any of SAP's accused products meet any limitation of the Asserted Claims. Nothing stated herein shall be construed as an admission or a waiver of any particular construction of any claim term. Nothing stated herein shall be construed as an admission that the Asserted Claims are directed to patent-eligible subject matter. SAP reserve all rights to challenge any of the Asserted Claims under 35 U.S.C. § 101. SAP also reserve all rights to challenge any of the claim terms herein under 35 U.S.C. § 112, including by arguing that they are indefinite, not supported by the written description and/or not enabled. Accordingly, nothing stated herein shall be construed as a waiver of any argument available under 35 U.S.C. § 112. Nothing stated herein shall be construed as an admission or waiver with respect to the effective filing date of any of the Asserted Claims.

The following charts include references to the structure, function, operation, and/or features of the technology described in the following prior art references. SAP reserves the right to present direct evidence of the structure, function, operation, and/or features of the technology described in the following prior art references (including product samples, source code, and/or witness testimony) and/or its prior art status, and to present alternative or additional documents concerning the structure, function, operation, and/or features of the technology described in the following prior art references and/or its prior art status, as evidence that the technology described in the following prior art references anticipates and/or renders obvious the Asserted Claims of the '738 patent.

The cited portions of the following prior art references are merely illustrative, and Defendants reserve the right to rely on alternative or additional evidence, including uncited portions of the following prior art references. Where the chart below states that the following references "describes" or "provides for" a limitation, such disclosure may be express, inherent, or implicit.

To the extent any limitation below is not expressly disclosed in any particular reference or prior art system as described in the other Exhibits it would have been obvious to a POSITA to combine with any of the references disclosing that limitation below. The rationales supporting obviousness of such a modification would be without limitation: (A) combining prior art elements according to known methods to yield predictable results; (B) simple substitution of one known element for another to obtain predictable results; (C) use of known technique to improve similar devices (methods or products) in the same way; (D) applying a known technique to a known device (method, or product) ready for improvement to yield predictable results; (E) "obvious to try"—choosing from a finite number of

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identified, predictable solutions, with a reasonable expectation of success; (F) known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations are predictable to one of ordinary skill in the art; (G) some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention.

For example, “the combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *KSR Int’l Co. v. Teleflex, Inc.*, 127 S. Ct. 1731, 1739-40 (2007). Because the ‘738 Patent simply arranges old elements—e.g., existing methods for storing context information in an outgoing message—with each performing the same function it had been known to perform and yields no more than what one would expect from such an arrangement, the combination is obvious. *Id.* at 1742.

In addition “[w]hen a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement a predictable variation, § 103 bars its patentability. For the same reason, if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill” *Id.* at 1740. Accordingly, a person of ordinary skill in the art at the time of the alleged invention would have been motivated to combine or adapt known or familiar methods in the art, especially where market forces prompt such variations. Here, market forces demanded the rapid adoption of networked computer software and the Internet and the implementation of fault tolerant systems so systems and data are constantly available. Thus one of skill in the art would have thought to combine or modify references that described known methods of storing context information in an outgoing message that one of skill in the art would have recognized as offering improvements to solutions of that time. The primary references for the ‘738 Patent and the references below describe methods that were known to offer such improvements in storing context information in an outgoing message, and, accordingly, one of skill in the art would have been motivated to combine or modify the primary references and these references.

Moreover, since there was a finite number of predictable solutions, a person of ordinary skill in the art had good reason to pursue the known options. *Id.* The primary references for the ‘738 Patent and the references below use familiar elements for their primary or well-known purposes in a manner well within the ordinary level of skill in the art. Accordingly, common sense and the knowledge of the prior art render the claims invalid under either Section 102 or Section 103. For example, common sense and knowledge of the prior art would suggest to person of ordinary skill in the art that fault tolerant systems, particularly those that are remotely located, should have essential elements which are required to function twenty-four hours a day, three hundred and sixty five days a year. Thus common sense would have motivated a person of ordinary skill in the art to combine existing fault tolerant systems and methods with known methods of providing fault tolerance in message-based communication systems. Such systems would include a method of storing context information in an outgoing message sent from a node including a computing device using a protocol stack having at least one layer.

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Moreover, as detailed in SAP's Invalidity Contentions, many of the claim elements were already known as admitted by the applicant in the specification. These elements represented design choices available to a person of ordinary skill. When there is a design need or market pressure to solve a problem such as identified previously and/or described in the '738 Patent, and there are a finite number of identified, predictable solutions, a person of ordinary skill would be motivated to combine the known options that are within his or her technical grasp. Here, one of ordinary skill in the art would have been motivated to combine known prior art solutions, including those in primary references for the '738 Patent and the references below and those admitted by applicant to be known.

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CITED PRIOR ART REFERENCES

Invalidity Based on U.S. Patent No. 5,938,775 (“Damani”)

In combination with other references charted separately and/or in combination with the knowledge of a person of ordinary skill, U.S. Patent No. 5,938,775 (“Damani”) renders obvious the ‘738 Patent. Damani was filed on May 23, 1997. Accordingly, Damani is prior art to the ‘738 Patent under one or more provisions of pre-AIA 35 U.S.C. § 102.

Invalidity Based on U.S. Patent No. 5,983,259 (“Cambell”)

In combination with other references charted separately and/or in combination with the knowledge of a person of ordinary skill, U.S. Patent No. 5,983,259 (“Cambell”) renders obvious the ‘738 Patent. Cambell was filed on February 19, 1997. Accordingly, Cambell is prior art to the ‘738 Patent under one or more provisions of pre-AIA 35 U.S.C. § 102.

Invalidity Based on “Building a Reliable Message Delivery System Using the CORBA Event Service” (“Ramani”)

In combination with other references charted separately and/or in combination with the knowledge of a person of ordinary skill, “Building a Reliable Message Delivery System Using the CORBA Event Service” (“Ramani”) renders obvious the ‘738 Patent. Ramani was published on January 1, 2000. Accordingly, Ramani is prior art to the ‘738 Patent under one or more provisions of pre-AIA 35 U.S.C. § 102.

Invalidity Based on “B-ISDN Signalling Protocol Processing for Large Multiplexed Subscriber System” (Mito)

In combination with other references charted separately and/or in combination with the knowledge of a person of ordinary skill, “B-ISDN Signalling Protocol Processing for Large Multiplexed Subscriber System” (Mito) renders obvious the ‘738 Patent. Mito was published on August 06, 2002. Accordingly, Mito is prior art to the ‘738 Patent under one or more provisions of pre-AIA 35 U.S.C. § 102.

Invalidity Based on U.S. Patent Publication No. 2003/0096592 (“Moreau”)

In combination with other references charted separately and/or in combination with the knowledge of a person of ordinary skill, U.S. Patent Publication No. 2003/0096592 (“Moreau”) renders obvious the ‘738 Patent. Moreau was filed on November 15, 2002. Accordingly, Moreau is prior art to the ‘738 Patent under one or more provisions of pre-AIA 35 U.S.C. § 102.

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Invalidity Based on U.S. Patent Publication No. 2003/0018808 (“Brouk”)

In combination with other references charted separately and/or in combination with the knowledge of a person of ordinary skill, U.S. Patent Publication No. 2003/0018808 (“Brouk”) renders obvious the ‘738 Patent. Brouk was filed on March 30, 2001. Accordingly, Brouk is prior art to the ‘738 Patent under one or more provisions of pre-AIA 35 U.S.C. § 102.

Invalidity Based on “A Persistent And Recoverable Middleware Approach To Alert Distribution” (“Vontela”)

In combination with other references charted separately and/or in combination with the knowledge of a person of ordinary skill, “A Persistent And Recoverable Middleware Approach To Alert Distribution” (“Vontela”) renders obvious the ‘738 Patent. Vontela was filed in May 2002. Accordingly, Vontela is prior art to the ‘738 Patent under one or more provisions of pre-AIA 35 U.S.C. § 102.

Invalidity Based on “Fault-tolerant SIP-based call control system” (“Bozinovski”)

In combination with other references charted separately and/or in combination with the knowledge of a person of ordinary skill, “Fault-tolerant SIP-based call control system” (“Bozinovski”) renders obvious the ‘738 Patent. Bozinovski was filed in February 2003. Accordingly, Bozinovski is prior art to the ‘738 Patent under one or more provisions of pre-AIA 35 U.S.C. § 102.

Invalidity Based on U.S. Patent No. 6,320,949 (“Kim”)

In combination with other references charted separately and/or in combination with the knowledge of a person of ordinary skill, U.S. Patent No. 6,320,949 (“Kim”) renders obvious the ‘738 Patent. Kim was filed on May 23, 1997. Accordingly, Kim is prior art to the ‘738 Patent under one or more provisions of pre-AIA 35 U.S.C. § 102.

Invalidity Based on U.S. Patent Publication No. 2003/0046604 (“Lau”)

In combination with other references charted separately and/or in combination with the knowledge of a person of ordinary skill, U.S. Patent Publication No. 2003/0046604 (“Lau”) renders obvious the ‘738 Patent. Lau was filed on May 23, 1997. Accordingly, Lau is prior art to the ‘738 Patent under one or more provisions of pre-AIA 35 U.S.C. § 102.