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***EX PARTE* REEXAMINATION COMMUNICATION TRANSMITTAL FORM**

REEXAMINATION CONTROL NO. 90/019,265.

PATENT UNDER REEXAMINATION 10868908.

ART UNIT 3992.

Enclosed is a copy of the latest communication from the United States Patent and Trademark Office in the above identified *ex parte* reexamination proceeding (37 CFR 1.550(f)).

Where this copy is supplied after the reply by requester, 37 CFR 1.535, or the time for filing a reply has passed, no submission on behalf of the *ex parte* reexamination requester will be acknowledged or considered (37 CFR 1.550(g)).



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BEFORE THE PATENT TRIAL AND APPEAL BOARD

Application Number: 90/019,265
Filing Date: 4 Oct 2023
Appellant(s): 10,868,908

M. Clare Frederick
K&L GATES LLP
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed February 3, 2025.

(1) Grounds of Rejection to be Reviewed on Appeal

Every ground of rejection set forth in the Office action dated October 2, 2024 from which the appeal is taken is being maintained by the examiner except for the grounds of rejection (if any) listed under the subheading “WITHDRAWN REJECTIONS.” New grounds of rejection (if any) are provided under the subheading “NEW GROUNDS OF REJECTION.”

The following ground(s) of rejection are applicable to the appealed claims.

Claims 1-3, 5-6, and 13-15 is/are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,160,808, issued to MAURYA, Sanjiv Kumar (noted herein as “Maurya”), in view of International Patent Application Publication WO 97/222 12, with the inventor of LOW, Colin *et al.*, being published on June 19, 1997 (noted herein as “Low”).

(2) Response to Argument

Initially, it is noted that claims 1-3, 5-6, and 13-15 of the ‘908 Patent are currently subject to reexamination, whereby claims 4, 7-12, and 16-17 of the ‘908 Patent are not subject to reexamination. With this, claims 1-3, 5-6, and 13-15 of the ‘908 Patent each stand rejected under 35 U.S.C. 103(a) as being unpatentable over Maurya in view of Low. No amendments to the claims have been made, and the claims remain in their original form.

Further, the Examiner notes that because the '908 Patent was filed as multiple continuations of applications, dating back to October 14, 2003, the '908 Patent would now appear to be expired. With this, MPEP 2240 states, in part:

... In making the determination of whether to order reexamination, the Office will determine the proper meaning of the patent claims by giving the claims their broadest reasonable interpretation consistent with the specification (see *In re Yamamoto*, 740 F.2d 1569 (Fed. Cir. 1984)), **except in the case of an expired patent (in a reexamination involving claims of an expired patent, claim construction is pursuant to the principle set forth by the court in *Phillips v. AWH Corp.*, 415 F.3d 1303, 1316, 75 USPQ2d 1321, 1329 (Fed. Cir. 2005) (words of a claim "are generally given their ordinary and customary meaning" as understood by a person of ordinary skill in the art in question at the time of the invention, see *Ex parte Papst-Motoren*, 1 USPQ2d 1655 (Bd. Pat. App. & Inter. 1986)).** If reexamination is ordered, the patent owner statement, if applicable, and any accompanying information submitted pursuant to 37 CFR 1.501(a)(2) will be considered during the examination stage to the fullest extent possible when determining the scope of any claims of the patent which are subject to reexamination. [Emphasis added].

Thus, since the '908 Patent would appear to be expired, the claim construction will be pursuant to the principle set forth by the court in *Phillips*, whereby the "words of a claim 'are generally given their ordinary and customary meaning' as understood by a person of ordinary skill in the art in question at the time of the invention."

Further, of the claims subject to reexamination in this proceeding, claims 1 and 13 are independent, whereby the arguments presented in the instant Appeal Brief revolve around the rejections of independent claims 1 and 13, which share similar elements. Thus, the instant appeal of each of the claims subject to reexamination would appear to stand or fall with respect to the rejection of independent claims 1 and 13.

In this regard, with respect to the rejections of claims 1 and 13, the arguments in the Appeal Brief appear to revolve around the limitations that recite the features of the “first message” and the “second message”, and more particularly, the claimed “multilink session identification” that is required to be included in the “second message”.

Particularly, regarding independent claim 1 of the ‘908 Patent, the arguments in the instant Appeal Brief appear to revolve around the limitations:

“1. A client device for multilink data packet communication with a server, the client device comprising:

... at least one processor configured to:

...

transmit a first message through the first network interface to the server, wherein the first message includes a multilink request a destination URL (sic);

transmit a second message through the second network interface to the server, wherein the second message includes a multilink session identification the destination URL (sic); ...”

Similarly, regarding independent claim 13 of the ‘908 Patent, the arguments in the instant Appeal Brief appear to revolve around the limitations:

“13. A first device comprising:

... at least one processor configured to:

...

transmit a first message through the network interface to a second device, wherein the first message includes a multilink request and a destination URL, ... ;

transmit a second message through the network interface to a third device, wherein the second message includes a multilink session identification that is unique to the multilink session and the destination URL, ...”

In this regard, independent claim 1 includes two notable errors in the above limitations, most likely leaving out the word “and” in both the transmitting steps for the first and second messages, so as to specifically require the first message to include “a multilink request and a destination URL”, as recited in independent claim 13, and the second message to include “a multilink session identification and the destination URL”, as similarly recited in claim 13. Here, in the instant proceeding, claim 1 is assumed to have the word “and” included in the limitations of independent claim 1.

With this, beginning on pages 8 and 9 of the Appeal Brief filed February 3, 2025 (hereafter “the Brief”), the Appellant first argues that the Examiner erred in arguing that Maurya’s endpoint discriminator value is the same as the claimed multilink session identification. In this regard, the Appellant argues on page 9 of the Brief that “Maurya’s description makes it clear that the endpoint discriminator value is the address of the endpoint in the system, it is not an identification of a communication session Maurya does not provide any mechanism for distinguishing amongst different sessions that may then occur between the client and the server.”

But in response, the current claim language does not expressly require “distinguishing amongst different sessions that may then occur between the client and the server”, as argued. Here, in reviewing claim 1, as a whole, the multilink session identification is seen to have the plain and ordinary meaning of the term “identification”, such that the multilink session identification identifies a multilink session, with this multilink session subsequently being used to receive data packets. Further, the Examiner notes that dependent claim 3 further defines the

“multilink session identification”, requiring “a server provides the multilink session identification that is unique to the multilink session.” This feature is specifically recited in independent claim 13, as noted above. With this, claims 3 and 13 require that the multilink session identification is unique, so as to identify the particular multilink session.

Looking further into the specification of the ‘908 Patent, in col. 12, line 1-col. 13, line 12, the ‘908 Patent is seen to describe the above noted claimed second message. Along this vein, in col. 12, lines 9-14, the ‘908 Patent states that “As part of a successful multilink PPP session setup, the initiating RCG - 85 receives a multilink PPP session ID, or “magic number”, which is used to identify this particular multilink PPP session and is also used for adding or removing links from the multilink bundle - 87.” Additionally, in col. 12, lines 51-60, the ‘908 Patent states “The initiating RCG then selects which of the responding remote RCGs - 86 it will use for the multilink PPP bundle - 87 and sends them a multilink initialization packet containing the URL of the destination as well as the multilink PPP session ID (magic number) and any other pertinent information required for the remote RCG to join in the existing multilink PPP bundle - 87.” Thus, with this, the claimed “multilink session identification” within the second message appears to be defined in the specification of the ‘908 Patent as a “magic number” that is described as being used “to identify this particular multilink PPP session and is also used for adding or removing links from the multilink bundle”.

With this, the combination of Maurya and Low is still seen to teach the limitation regarding the claimed “multilink session identification”, such that Maurya teaches of the claimed

“second message”, which “includes a multilink session identification” and the combination of Maurya and Low teach that the second message includes the destination URL.

Particularly, with respect to Maurya, the reference states in the Abstract that “Specifically, during LCP negotiations, a multi-link PPP originator assigns itself **a unique endpoint discriminator value and informs all its immediate PPP peers by sending the latter, via a first bundle of outgoing links, an LCP Endpoint Discriminator packet containing this value.** Each of these immediate PPP peers assumes, as its endpoint discriminator, the value that has been provided to it in the LCP Endpoint Discriminator packet it receives from the originator and then sends an LCP Endpoint Discriminator packet containing **this same endpoint discriminator value**, via a second bundle of outgoing links, to all of its immediate PPP peers.” Here, this “unique endpoint discriminator value”, as described in the Abstract, appears to be used to identify the particular multilink PPP session, being required by the plain meaning of the claim term, and consistent with the “multilink session identification” described in the specification of the ‘908 Patent.

Further, as discussed in col. 9, lines 14-55, Maurya states “The endpoint discriminator packet identifies, by specifying an address, of an end system (an “endpoint”), then situated on an end of a link, that is transmitting this particular packet. This peer can be an existing system, i.e., one whose address has already been specified through prior LCP negotiations to its communicating peer, though using another, i.e., existing, link to that peer, or a different system altogether. If the data contained in this packet identifies the end system as an existing system (i.e., previously so identified), then, through the PPP protocol, **the link will be joined to an**

existing bundle of links, so as to form a "pipe" among which multi-link PPP packets will be distributed for transport between the end system peer and its peer. Alternatively, if the data contained in packet 400 **differs from that of any existing system**, then the PPP protocol **assumes a new bundle of links exists and assigns the link to this new bundle. ...**

Identification of the endpoint system (commonly referred to as either an **"endpoint discriminator" or "endpoint identifier"**) is accomplished through class field 430 and address field 440, which collectively contain data carried by this packet. ... For example, a class field having a value of illustratively zero, one or two specifies that the following address is a null class (i.e., the address is zero octets long), a locally assigned address, such as a serial number (having a length up to twenty octets), or an Internet Protocol (IP) address (having a length of four octets).”

Thus, the “endpoint discriminator” value (also described as the “endpoint identifier”) described in Maurya is clearly seen to identify a particular multilink PPP session and is also used for adding or removing links from the multilink bundle, being the defining function of the “multilink session identification”, as discussed in the specification of the ‘908 Patent.

Continuing, on page 10 of the Brief, the Appellant argues that the Examiner erred in arguing multilink short sequence number is the same as the claimed multilink session identification. Here, the Appellant argues that “[t]he claimed multi-link session identification is a single ‘magic number’ that is common to every packet in a given multilink PPP session. In contrast, Maurya’s sequence number increases by one with each successive packet sent.

Maurya's sequence number doesn't identify the session: it identifies the order of the packets within the session."

In this regard, in an additional interpretation, the Examiner also noted that the multi-link Short Sequence Number can also be interpreted as the claimed "multi-link session identification". Particularly, in col. 8, line 65-col. 9, line 13, Maurya also discloses that "Each specific option has to be separately negotiated between the PPP peers and appropriately acknowledged prior to its use. Inasmuch as the only values for this type field, i.e., the only configuration options, that are relevant to understanding the invention are 17, 18 and 19, which designate a multi-link MRRU (Multi-link Maximum Receive Reconstructed unit) request, a multi-link Short Sequence Number header request and a "multi-link endpoint discriminator" option, respectively (which will all be discussed in detail below in conjunction with FIG. 5). ... **Each such multi-link PPP packet contains a sequence number--which increases by one with each successive packet**, inserted by the multi-link protocol." Thus, with these teachings, the multi-link Short Sequence Number can also be interpreted as a "multi-link session identification", as each packet in the multi-link contains this sequence number, which "identifies" the multilink session, as described in the specification of the '908 Patent.

Further, on page 10 of the Brief, the Appellant argues that the Examiner erred in arguing that it would have been obvious to combine Maurya and Low such that the first and second messages include a multilink request and a destination URL. First, as noted above, the first message and the second message in claims 1 and 13 require different elements. Particularly, the first message of claims 1 and 13 is required to include "a multilink request and a destination

URL”, while the second message is required to include “a multilink session identification the destination URL”.

With this, with these sections discussed above, Maurya is seen to disclose at least one processor configured to “transmit a second message through the second network interface to the server, wherein the second message includes a multilink session identification [*sic*] [*and*] the destination IP address”. In addition, in col. 9, lines 35-55, Maurya also states that “Other classes of addresses exist. Inasmuch as the invention functions equally well with any such address and the manner through which an address is assigned and its respective class are irrelevant to the present invention, I will omit any further details of the latter two aspects.”

But in this regard, the reference of Maurya does not expressly disclose if the first and second messages include a multilink request or a multilink session identification *and* a **destination URL**, as currently recited in independent claim 1, and similarly in claim 13, as Maurya is seen to only describe a destination IP address. However, the secondary reference of Low discloses a client device that transmits messages through a network interface, whereby one message includes a destination URL, as seen in Fig. 4, with the terminal 31 transmitting a message 38 to a server 32 that includes a destination URL. In addition, as read on page 11, line 12-page 13, line 15, Low states “A cornerstone of the WWW is its ability to address particular information resources by means of an Uniform Resource Locator (URL) that identifies a resource by location...By way of example, a full or ‘absolute’ URL will comprise the following elements:...the Internet host domain or IP address... This request includes a request method, and the ‘Request-URI’ (which is generally just the absolute path of the resource on the server as

identified by the 'abs-path' element of the URI); the request may include additional data elements."

Thus, it would have been obvious for one of ordinary skill in the art to have include a destination URL, as recognized by Low, within the second message disclosed by Maurya. The suggestion/motivation for doing so would be that the client device of Maurya would conform with known protocols for communicating packets in systems utilizing point-to-point protocol (PPP), as discussed by Low in page 11, lines 21-page 12, line 28. Here, Low describes that utilizing URLs for PPP communication of packets between user terminals and Internet service providers was well known, and thus, this modification of Maurya with the functionality taught in Low would easily be implemented with these well-known teachings, as exemplified by Low, and would yield predictable results.

Continuing, on pages 11-15 of the Brief, the Appellant argues that Maurya fails to teach or suggest logically connecting devices from different networks as required by the claims. In this regard, on page 11 of the Brief, the Appellant begins arguing that the '908 Patent describes a network communication technology that routes packets across a multilink communication pathway spanning multiple **heterogeneous** networks, while Maurya teaches a network communication technology that provides multilink connectivity over a single **homogeneous** network. Further, on page 15, the Appellant argues that Maurya suffers from the very problem that the '908 Patent solves. Maurya requires physically connecting devices operating within a single network. The '908 Patent teaches systems and methods for logically connecting devices operating across different networks."

In response, the Examiner notes that this alleged distinction is not clear in the current claim language. Rather claim 1 of the '908 Patent expressly recites "A client device for multilink data packet communication with a server", with the client device comprising a first network interface that transmits a first message **to the server**, and a second network interface that transmits a second message **to the server**. The reference of Maurya is seen to expressly disclose this claimed structure, as shown in Fig. 6A of Maurya, as illustrated in the Brief on page 14. Here, the current claim language does not require multiple networks, and there is not any required claimed pathway spanning multiple heterogeneous networks, as argued by the Appellant.

However, despite this, upon review of Maurya, the reference of Maurya actually does appear to describe that the user would be able to connect to multiple networks, which would span multiple heterogeneous networks, as argued. Here, in Maurya, the server device is seen to connect to various networks for data communication.

Specifically, in col. 12, lines 17-31, Maurya states "Currently, client PC 610 can utilize any one of various existing operating systems that, if appropriately configured, is able to segment a PPP frame into multi-link PPP packets and distribute those packets among multiple links in a bundle (i.e., a pipe)." Further, in col. 1, line 65-col. 5, line 4, the reference describes in the Background of the Disclosure, that a multi-linked connection allows different packetized data from various different sources to be transmitted to a device so as to attain an increased bandwidth. Here, in col. 3, lines 1-13, Maurya states "In essence, multi-link operation involves

real-time allocation (and deallocation) of any number of these links in the bundle to a common communication channel, i.e., the pipe, in order to dynamically provide sufficient transmission bandwidth for the underlying communication that is then to be carried by the channel.”.

Continuing, on pages 15 and 16 of the Brief, the Appellant argues that the “endpoint discriminator value” in Maurya is not equivalent to a “multilink session identification”. Here, in this section, the Appellant points to three alleged differences, arguing that Maurya’s endpoint discriminator “is the physical link address for the sending and receiving devices, as well as each related terminal adapter, whereas the ‘908 Patent’s multilink session identification is not”, that “because Maurya’s endpoint discriminator value is the physical link address for the network devices, it cannot be used to differentiate between various multilink sessions occurring between Maurya’s PC client and server”, and that Maurya’s endpoint discriminator is the LCP configuration process prior to data being sent over the multilink connection, whereas the ‘908 Patent’s multilink session identification is used during the communication session to add and remove links to the multilink bundle.”

But in response, while Maurya’s endpoint discriminator may have some different functionality than “a multilink PPP session ID” that is described in the specification of the ‘908 Patent, the reference of Maurya is still seen to teach that the endpoint discriminator identifies a multilink session, with the claim 1 reciting “the second message includes a multilink session identification...”. Again, the claimed “multilink session identification” in claim 1 of the ‘908 Patent is seen to have the plain and ordinary meaning of the term “identification”, such that the multilink session identification identifies a multilink session, with this multilink session

subsequently being used to receive data packets. Further, independent claim 13 additionally defines the “multilink session identification that is unique to the multilink session.”

Here, once again, looking into the specification of the ‘908 Patent, in col. 12, lines 9-14, the ‘908 Patent states that “As part of a successful multilink PPP session setup, the initiating RCG - 85 receives **a multilink PPP session ID, or “magic number”, which is used to identify this particular multilink PPP session and is also used for adding or removing links from the multilink bundle - 87.**” Further, in col. 12, lines 51-60, the ‘908 Patent additionally states “The initiating RCG then selects which of the responding remote RCGs - 86 it will use for the multilink PPP bundle - 87 and sends them a multilink initialization packet **containing the URL of the destination as well as the multilink PPP session ID (magic number)** and any other pertinent information required for the remote RCG to join in the existing multilink PPP bundle - 87.” Thus, with this, the claimed “multilink session identification” within the second message appears to be defined in the specification of the ‘908 Patent as a number used “to identify this particular multilink PPP session and is also used for adding or removing links from the multilink bundle”.

With this, as discussed above, Maurya states in the Abstract that “Specifically, during LCP negotiations, a multi-link PPP originator assigns itself **a unique endpoint discriminator value and informs all its immediate PPP peers by sending the latter, via a first bundle of outgoing links, an LCP Endpoint Discriminator packet containing this value.** Each of these immediate PPP peers assumes, as its endpoint discriminator, the value that has been provided to it in the LCP Endpoint Discriminator packet it receives from the originator and then sends an

LCP Endpoint Discriminator packet containing **this same endpoint discriminator value**, via a second bundle of outgoing links, to all of its immediate PPP peers.” Here, this “unique endpoint discriminator value”, as described in the Abstract, appears to be used to identify the particular multilink PPP session, being required by the plain meaning of the claim term, and consistent with the “multilink session identification” described in the specification of the ‘908 Patent.

In addition, as discussed in col. 9, lines 14-55, Maurya states “The endpoint discriminator packet identifies, by specifying an address, of an end system (an "endpoint"), then situated on an end of a link, that is transmitting this particular packet. This peer can be an existing system, i.e., one whose address has already been specified through prior LCP negotiations to its communicating peer, though using another, i.e., existing, link to that peer, or a different system altogether. If the data contained in this packet identifies the end system as an existing system (i.e., previously so identified), then, through the PPP protocol, **the link will be joined to an existing bundle of links, so as to form a "pipe" among which multi-link PPP packets** will be distributed for transport between the end system peer and its peer. Alternatively, if the data contained in packet 400 **differs from that of any existing system**, then the PPP protocol **assumes a new bundle of links exists and assigns the link to this new bundle.** ...

Identification of the endpoint system (commonly referred to as either an "**endpoint discriminator**" or "**endpoint identifier**") is accomplished through class field 430 and address field 440, which collectively contain data carried by this packet. ... For example, a class field having a value of illustratively zero, one or two specifies that the following address is a null class (i.e., the address is zero octets long), a locally assigned address, such as a serial number (having

a length up to twenty octets), or an Internet Protocol (IP) address (having a length of four octets).”

Thus, the “endpoint discriminator” value (also described as the “endpoint identifier”) described in Maurya is clearly seen to identify a particular multilink PPP session and is also used for adding or removing links from the multilink bundle, being the defining function of the “multilink session identification”, as discussed in the specification of the ‘908 Patent.

Continuing, on pages 16 and 17 of the Brief, the Appellant specifically argues that Maurya’s endpoint discriminator is a physical link address and the ‘908 Patent’s multilink session identification is not. Here, the Appellant initially argues on page 16 of the Brief that “the ‘908 Patent’s multilink session identification ... is used to identify a particular multilink session and is also used for adding or removing links from the multilink bundle.” But again, as discussed above, the “endpoint discriminator” value (also described as the “endpoint identifier”) described in Maurya is seen to identify a particular multilink PPP session and is also used for adding ... links from the multilink bundle, being the defining function of the “multilink session identification”, as discussed in the specification of the ‘908 Patent.

Additionally, the Appellant further argues differences of Maurya and the invention of the ‘908 Patent, stating on page 17 of the Brief that “Maurya’s endpoint discriminator value being a Layer 2 data link address of a network device ... and the ‘908 Patent’s multilink session identification operating in Layers 3 and above to identify a unique communication session.” But with this, the current claim language is not seen to require operating in Layers 3 and above, as

argued. In this regard, it is improper to import limitations from the specification into the claim language.

Particularly, MPEP 2111.01(II) states, in part:

"Though understanding the claim language may be aided by explanations contained in the written description, it is important not to import into a claim limitations that are not part of the claim. For example, a particular embodiment appearing in the written description may not be read into a claim when the claim language is broader than the embodiment." *Superguide Corp. v. DirecTV Enterprises, Inc.*, 358 F.3d 870, 875, 69 USPQ2d 1865, 1868 (Fed. Cir. 2004). See also *Liebel-Flarsheim Co. v. Medrad Inc.*, 358 F.3d 898, 906, 69 USPQ2d 1801, 1807 (Fed. Cir. 2004) (discussing recent cases wherein the court expressly rejected the contention that if a patent describes only a single embodiment, the claims of the patent must be construed as being limited to that embodiment); *E-Pass Techs., Inc. v. 3Com Corp.*, 343 F.3d 1364, 1369, 67 USPQ2d 1947, 1950 (Fed. Cir. 2003) ("Interpretation of descriptive statements in a patent's written description is a difficult task, as an inherent tension exists as to whether a statement is a clear lexicographic definition or a description of a preferred embodiment. The problem is to **interpret claims 'in view of the specification' without unnecessarily importing limitations from the specification into the claims.**");...

With this, independent claim 1 currently recites "wherein the second message includes a multilink session identification [*sic*] the destination URL". Here, there is no current requirement in the claim language as to the specific layer that the multilink session identification operates in, as argued. Thus, the reference of Maurya can still be interpreted as teaching a "multilink session identification".

Continuing, on pages 17-19 of the Brief, the Appellant argues that Maurya's endpoint discriminator value cannot be used to differentiate between multilink sessions occurring between Maurya's PC client and server.

Here, on page 18 of the Brief, the Appellant argues a difference in Maurya and the '908 Patent, stating that "In contrast, the '908 Patent's claimed multilink request, multilink session identification, and destination URL are solutions for managing multilink communication above an existing link layer." In addition, on page 19 of the Brief, the Appellant further argues "This is a significant improvement from the 'fixed pairs of systems' type networks taught by Maurya and a direct benefit of the multilink session identification operating above the Layer 2 endpoint discriminator used in Maurya." But with this, once again, the current claim language is not seen to require operating in any layers, let alone in a Layer above Layer 2, as argued. Once again, it is improper to import limitations from the specification into the claim language.

Continuing, on pages 19 and 20 of Appellant argues that Maurya's endpoint discriminator is not used during the communication session to add and remove link to the multilink PPP bundle. But in response, the current claim language does not require adding or removing a link to the multilink bundle during the communication session, as argued. Once again, it is improper to import limitations from the specification into the claim language.

But in this regard, the reference of Maurya is seen to describe that the endpoint discriminator is utilized to add links to the multilink bundle. Particularly, as discussed in col. 9, lines 14-55, Maurya states "The endpoint discriminator packet identifies, by specifying an address, of an end system (an "endpoint"), then situated on an end of a link, that is transmitting this particular packet. This peer can be an existing system, i.e., one whose address has already been specified through prior LCP negotiations to its communicating peer, though using another, i.e., existing, link to that peer, or a different system altogether. **If the data contained in this**

packet identifies the end system as an existing system (i.e., previously so identified), then, through the PPP protocol, the link will be joined to an existing bundle of links, so as to form a "pipe" among which multi-link PPP packets will be distributed for transport between the end system peer and its peer. Alternatively, if the data contained in packet 400 differs from that of any existing system, then the PPP protocol assumes a new bundle of links exists and assigns the link to this new bundle. ... Identification of the endpoint system (commonly referred to as either an "endpoint discriminator" or "endpoint identifier") is accomplished through class field 430 and address field 440, which collectively contain data carried by this packet. ... For example, a class field having a value of illustratively zero, one or two specifies that the following address is a null class (i.e., the address is zero octets long), a locally assigned address, such as a serial number (having a length up to twenty octets), or an Internet Protocol (IP) address (having a length of four octets)."

Thus, the "endpoint discriminator" value (also described as the "endpoint identifier") described in Maurya is seen to be used to identify a particular multilink PPP session and is also used for adding links from the multilink bundle, being the defining function of the "multilink session identification", as discussed in the specification of the '908 Patent.

Continuing, on pages 20-23 of the Brief, the Appellant argues that Maurya's "multi-link short sequence number" is not equivalent to a "multilink session identification". In this regard, once again, in an additional interpretation, the Examiner also noted that the multi-link Short Sequence Number can also be interpreted as the claimed "multi-link session identification". Particularly, in col. 8, line 65-col. 9, line 13, Maurya also discloses that "Each specific option has

to be separately negotiated between the PPP peers and appropriately acknowledged prior to its use. Inasmuch as the only values for this type field, i.e., the only configuration options, that are relevant to understanding the invention are 17, 18 and 19, which designate a multi-link MRRU (Multi-link Maximum Receive Reconstructed unit) request, a multi-link Short Sequence Number header request and a "multi-link endpoint discriminator" option, respectively (which will all be discussed in detail below in conjunction with FIG. 5). ... **Each such multi-link PPP packet contains a sequence number--which increases by one with each successive packet**, inserted by the multi-link protocol.” Thus, with these teachings, the multi-link Short Sequence Number can also be interpreted as a “multi-link session identification”, as each packet in the multi-link contains this sequence number, which “identifies” the multilink session, as described in the specification of the ‘908 Patent.

With this, on page 22 of the Brief, the Appellant argues that “Maurya does not support multiple concurrent sessions ... and therefore, there is no purpose for identifying a given session with a multilink session identification.” But here, the current claim language does not require having multiple concurrent sessions, as argued. Once again, it is improper to import limitations from the specification into the claim language.

Continuing, on page 23, the Appellant argues that Low does not teach a multilink session identification. With this however, Low is not utilized to teach a multilink session identification. Rather the reference of Low is utilized in the rejection to teach that using a URL for an endpoint address was well-known, as the primary reference of Maurya describes using an IP address of the

endpoint, and that it would have been obvious to a person of ordinary skill in the art to utilize the addressing system of a URL in the system of Maurya, rather than just an IP address.

Further, on pages 23-25 of the Brief, the Appellant argues that the Examiner erred in arguing a motivation to combine Maurya and Low. Here, on page 25 of the Brief, the Appellant argues that “Low’s URL requires that Layer 3-4 (TCP-IP) routing protocols are used...to access the HTTP Layer 7 server. Maurya does not teach or suggest the use of any Layer 3-7 routing functionality nor even alludes to how other routing protocols would be needed to connect to a specific URL. This omission further demonstrates that the skilled artisan would not be motivated to modify the packets of Maurya to include the web page URL of Low.” But in response, the reference of Maurya recognized in col. 9, lines 14-55 that different “classes of addresses exist”, such that “the invention functions equally well with any such address and the manner through which an address is assigned and its respective class are irrelevant to the present invention”.

With this, the reference of Maurya discloses on page 1, lines 19-27 that “To facilitate carriage of datagrams of different network layer protocols, such as IP (Internet Protocol), IPX, DECnet, AppleTalk and others, over a single point-to-point link, a protocol, collectively referred to as the “PPP” protocol, has recently been developed. The PPP protocol has self-contained mechanisms for specifying a specific network layer protocol to be carried in a PPP packet, testing the link itself and negotiating a variety of options for facilitating efficient communication over that link.” Further, Maurya disclose on page 1, line 65-col. 2, line 25 that “During the past five years, Internet usage, particularly that of the world wide web, has exploded and continues to do so. Substantial increases still occur, on a monthly basis, not only in the size of the user

community but also in the number of operational web sites. Moreover, as potential and existing site proprietors realize the potential of the Internet to very inexpensively reach an ever-increasing and diverse pool of widely dispersed potential users, these proprietors continue to post vastly increasing amounts of data, specifically, e.g., **files for increasingly sophisticated web pages that include both textual and graphical information, to their web sites for user selection and downloading.** Each time a user stationed at, e.g., a personal computer (PC) and using a web browser, "clicks" on a hypertext link or otherwise selects a web page, a file containing, e.g., HTML (hypertext mark-up language) source code for that page is transmitted by a remote web server through an Internet connection to the personal computer for rendering thereat. In addition, the Internet is also increasingly being used as a cost-effective method to deliver software to end users; an item of software being transmitted, again as a file(s), though oftentimes in compressed form, from a remote "ftp" (file transfer protocol) server to a personal computer then being operated by that user."

Looking at the reference of Low, on page 11, line 12-page 13, line 15, Low states "A cornerstone of the WWW is its ability to address particular information resources by means of an Uniform Resource Locator (URL) that identifies a resource by location...By way of example, a full or 'absolute' **URL will comprise the following elements:... the Internet host domain or IP address...** This request includes a request method, and the 'Request-URI' (which is generally just the absolute path of the resource on the server as identified by the 'abs-path' element of the URI); the request may include additional data elements."

Thus, it would have been obvious for one of ordinary skill in the art to have include a destination URL, as recognized by Low, within the first and second messages disclosed by Maurya. The suggestion/motivation for doing so would be that the client device of Maurya would conform with known protocols for communicating packets in systems utilizing point-to-point protocol (PPP), as discussed by Low in page 11, lines 21 -page 12, line 28. Here, Low describes that utilizing URLs for PPP communication of packets between user terminals and Internet service providers was well known, and thus, this modification of Maurya with the functionality taught in Low would easily be implemented with these well-known teachings, as exemplified by Low, and would yield predictable results. In additional, Maurya expressly states that the communicated data can be various web pages on the Internet [see col. 1, line 65 -col. 2, line 25], and Maurya expressly recognized that different “classes of addresses exist”, such that “the invention functions equally well with any such address and the manner through which an address is assigned and its respective class are irrelevant to the present invention”. [see col. 9, lines 14-55]. With this, the rejection of claims 1 and 13 as being unpatentable over the combination of Maurya in view of Low, is still deemed to be proper, and the rejection should be sustained.

Additionally, on pages 25-28 of the Brief, the Appellant argues that there is no motivation to combine Maurya and Low, and even if combined, the combination would not render the ‘908 Patent claims obvious. In response to Appellant’s argument that there is no motivation to combine the references, the examiner recognizes that obviousness may be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the

references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988), *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992), and *KSR International Co. v. Teleflex, Inc.*, 550 U.S. 398, 82 USPQ2d 1385 (2007).

In this case, the primary reference of Maurya expressly discloses in col. 9, lines 14-55 that different “classes of addresses exist”, such that “the invention functions equally well with any such address and the manner through which an address is assigned and its respective class are irrelevant to the present invention”.

Further, the reference of Low describes using URLs, and states on page 7, line 29-page 8, line 6 that “For an entity to have a presence on the Internet, it needs both access to a network connected to the Internet and an IP address.” Further, Low additionally states on page 11, line 12-page 13, line 15, that “A cornerstone of the WWW is its ability to address particular information resources by means of an Uniform Resource Locator (URL) that identifies a resource by location...By way of example, a full or ‘absolute’ **URL will comprise the following elements:...the Internet host domain or IP address...** This request includes a request method, and the ‘Request-URI’ (which is generally just the absolute path of the resource on the server as identified by the ‘abs-path’ element of the URI); the request may include additional data elements.”

With this, motivation to utilize URL’s in the system described in Maurya would be that the client device of Maurya would conform with known protocols for Internet communication of

packets in systems utilizing point-to-point protocol (PPP), as discussed by Low in page 11, lines 21-page 12, line 28. Here, Maurya described using IP addresses in the messages, and Low describes that utilizing URLs for PPP communication of packets would include IP addresses, such that utilizing URLs between user terminals and Internet service providers was well known, and thus, this modification of Maurya with the functionality taught in Low would easily be implemented with these well-known teachings, as exemplified by Low, and would yield predictable results.

Continuing, on page 27 of the Brief, the Appellant argues that the Examiner's arguments fail to consider the purpose and content of the URL used in Low. Further, the Examiner's allegations are conclusory and do not establish motivation for the skilled artisan to modify the packets of Maurya to include Low's URL."

But here, the reference of Low is being utilized to show that it would have been obvious to one of ordinary skill in the art to use the addressing scheme of a URL in a system that sends packets in accordance with Internet protocol.

Here, the reference of Maurya discloses on page 1, lines 19-27 that "To facilitate carriage of datagrams of different network layer protocols, such as IP (Internet Protocol), IPX, DECnet, AppleTalk and others, over a single point-to-point link, a protocol, collectively referred to as the "PPP" protocol, has recently been developed. The PPP protocol has self-contained mechanisms for specifying a specific network layer protocol to be carried in a PPP packet, testing the link itself and negotiating a variety of options for facilitating efficient communication over that link."

Further, Maurya disclose on page 1, line 65-col. 2, line 25 that “During the past five years, Internet usage, particularly that of the world wide web, has exploded and continues to do so. Substantial increases still occur, on a monthly basis, not only in the size of the user community but also in the number of operational web sites. Moreover, as potential and existing site proprietors realize the potential of the Internet to very inexpensively reach an ever-increasing and diverse pool of widely dispersed potential users, these proprietors continue to post vastly increasing amounts of data, specifically, e.g., **files for increasingly sophisticated web pages that include both textual and graphical information, to their web sites for user selection and downloading.** Each time a user stationed at, e.g., a personal computer (PC) and using a web browser, “clicks” on a hypertext link or otherwise selects a web page, a file containing, e.g., HTML (hypertext mark-up language) source code for that page is transmitted by a remote web server through an Internet connection to the personal computer for rendering thereat. In addition, the Internet is also increasingly being used as a cost-effective method to deliver software to end users; an item of software being transmitted, again as a file(s), though oftentimes in compressed form, from a remote “ftp” (file transfer protocol) server to a personal computer then being operated by that user.”

With this, looking at the reference of Low, on page 11, line 12-page 13, line 15, Low states “A cornerstone of the WWW is its ability to address particular information resources by means of an Uniform Resource Locator (URL) that identifies a resource by location...By way of example, a full or ‘absolute’ **URL will comprise the following elements:... the Internet host domain or IP address...** This request includes a request method, and the ‘Request-URI’ (which

is generally just the absolute path of the resource on the server as identified by the 'abs-path' element of the URI); the request may include additional data elements.”

Thus, it would have been obvious for one of ordinary skill in the art to have include a destination URL, as recognized by Low, within the first and second messages disclosed by Maurya. The suggestion/motivation for doing so would be that the client device of Maurya would conform with known protocols for communicating packets in systems utilizing point-to-point protocol (PPP), as discussed by Low in page 11, lines 21 -page 12, line 28. Here, Low describes that utilizing URLs for PPP communication of packets between user terminals and Internet service providers was well known, and thus, this modification of Maurya with the functionality taught in Low would easily be implemented with these well-known teachings, as exemplified by Low, and would yield predictable results. In additional, Maurya expressly states that the communicated data can be various web pages on the Internet [see col. 1, line 65 -col. 2, line 25], and Maurya expressly recognized that different “classes of addresses exist”, such that “the invention functions equally well with any such address and the manner through which an address is assigned and its respective class are irrelevant to the present invention”. [see col. 9, lines 14-55]. With this, the rejection of claims 1 and 13 as being unpatentable over the combination of Maurya in view of Low, is still deemed to be proper, and the rejection should be sustained.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

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Requirement to pay appeal forwarding fee. In order to avoid dismissal of the instant appeal in any application or *ex parte* reexamination proceeding, 37 CFR 41.45 requires payment of an appeal forwarding fee within the time permitted by 37 CFR 41.45(a), unless appellant had timely paid the fee for filing a brief required by 37 CFR 41.20(b) in effect on March 18, 2013.