2012-1513, -1514
(Reexamination No. 95/001,001)

UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

CISCO SYSTEMS, INC.,
Appellant,

v.

DAVID J. KAPPOS, DIRECTOR, UNITED STATES PATENT AND TRADEMARK OFFICE,
Appellee,

v.

TELES AG INFORMATIONSTECHNOLOGIEN,
Cross-Appellant.

Appeals from the United States Patent and Trademark Office,
Board of Patent Appeals and Interferences.

BRIEF FOR CROSS-APPELLANT TELES AG INFORMATIONSTECHNOLOGIEN

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FEBRUARY 6, 2013

UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

CISCO SYSTEMS, INC. V. KAPPOS

CASE NO. 2012-1513, -1514

CERTIFICATE OF INTEREST

Counsel for Cross-Appellant Teles AG, certifies the following.

1. The full name of every party or amicus represented by me is:

Teles AG Informationstechnologien, and Sigram Schindler Beteiligungsgesellschaft mbH.

2. The name of the real party in interest (if the party named in the caption is not the real party in interest) represented by me is:

Teles AG Informationstechnologien and

Sigram Schindler Beteiligungsgesellschaft mbH.

3. All parent corporations and any publicly held companies that own 10 percent or more of the stock of the party or amicus curiae represented by me are:

None

4. The names of all law firms and the partners or associates that appeared for the party now represented by me in the trial court or agency or are expected to appear in this court are:

Foley & Lardner LLP and its attorneys: Michael D. Kaminski, Howard N. Shipley, George E. Quillin, and Ryan A. Schmid.

Fried, Frank, Harris, Shriver & Jacobson LLP and its attorneys: James W. Dabney, Douglas W. Baruch and John F. Duffy.

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Date: February 6, 2013

Signature of Counsel /s/ George E. Quillin

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I. STATEMENT OF RELATED CASES

No other appeal in or from this proceeding has previously been before this or any other appellate court. This appeal is related to pending Appeal No. 2012-1297, involving Teles AG Informationstechnologien ("TELES") and Sigram Schindler Beteiligungsgesellschaft MbH ("SSBG"), and Cisco Systems, Inc. ("Cisco"), on appeal to this Court from the U.S. District Court for the District of Columbia (Case No. 11-00476 (Howell, J.)), of an appeal of a decision by the Board of Patent Appeals and Interferences (the "BPAI") in an *ex parte* reexamination (Control No. 90/010,017) of related U.S. Patent No. 6,954,453 ("the '453 patent"). Additionally, TELES and Cisco have been involved in a litigation in the U.S. District Court for the District of Delaware relating to Cisco's infringement of U.S. Patent No. 7,145,902 ("the '902 Patent"), the '453 patent, and U.S. Patent No. 7,483,431. That litigation is titled *Cisco Systems, Inc.* v. *Sigram Schindler Beteiligungsgesellschaft*, C.A. No. 09-232-SLR & No. 09-072-SLR (D. Del.), now stayed.

II. STATEMENT OF JURISDICTION

This is an appeal from a final decision of the BPAI that affirmed the United States Patent and Trademark Office's ("USPTO's") Central Examination Unit ("CRU"), *i.e.*, that confirmed certain claims as patentable and rejected certain other claims as unpatentable over prior art in an *inter partes* patent reexamination. A44-

45. Jurisdiction over this appeal is under 35 U.S.C. § 141 and 144 and 28 U.S.C. § 1295(a)(4)(A).

III. COUNTERSTATEMENT OF THE ISSUES

1. Whether the BPAI's claim interpretation describes the terms "**communications connection**" of a telephone call, "**signal**", "**real-time change-over**" of a communications connection, and "**packet- and any line-switching network**" in accordance with *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) and *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289 (2012).

A. Whether the BPAI's claim interpretation of the terms "Packet- and Line-switching Network" and "Telephone Call" / "Data Transfer with Real-Time Properties" was decided in accordance with *Phillips* and *Mayo*.

B. Whether the BPAI's decision not to construe the terms "Control Signal" and "Communications Connection" was proper under the guidance of *Phillips* and *Mayo*.

2. If the Court determines that the BPAI's claim interpretation of the terms "Network" and "Telephone Call" / "Data Transfer with Real-Time Properties" was incorrect and/or that the BPAI's decision not to construe the terms "Control Signal" and "Communications Connection" was improper:

A. Whether claims 68, 69, 71, 75, 77, 79, 82, 84, 87, 90, 92, 95, and/or 98 are anticipated by Yoshida (U.S. Pat. No. 5,347,516) under the correct claim interpretation;

B. Whether claims 68, 69, 71, 75, 77, 79, and/or 82 are anticipated by Farese (U.S. Pat. No. 4,996,685) under the correct claim interpretation;

C. Whether claims 68, 69, 71, 75, 77, 79, and/or 82 are anticipated by Matsukawa (U.S. Pat. No. 5,598,411) under the correct claim interpretation; and/or

D. Whether claims 68, 69, 71, 75, 77, 79, 82, 84, 87, 90, 92, 95, 98, 100, and/or 102 are anticipated by Jonas (U.S. Pat. No. 6,137,792) under the correct claim interpretation.

3. Even if the Court determines that the BPAI's claim interpretation was not improper, whether the BPAI's finding that Jonas anticipates claims 100 and 102 was supported by substantial evidence, particularly with respect to:

A. Whether the BPAI's finding that Jonas discloses "changing-over" from a packet-switched network to a line-switched network without interruption of the communications connection (*i.e.*, for data transfer with real-time properties between end terminals) was supported by substantial evidence; and

B. Whether the BPAI's finding that Jonas discloses a structure capable of sustaining a "data transfer with real-time properties" (*i.e.*, with delay times not longer than 0.5 sec.) was supported by substantial evidence.

4. Whether the BPAI's decision to affirm the CRU's confirmation of claims 91 and 104 as patentable should be affirmed.

IV. STATEMENT OF THE CASE

The '902 Patent issued on December 5, 2006, to Sigram Schindler *et al*., owned then by TELES AG, and now owned by SSBG.[1] A4182. On September 7, 2007, Cisco requested *inter partes* reexamination of the '902 Patent under 35 U.S.C. §§ 311-318 and 37 C.F.R. § 1.913. A4224. The CRU issued a Right of Appeal Notice ("RAN") on October 3, 2008, which rejected all but two of the challenged claims as being anticipated, with some of the claims allegedly being anticipated by multiple prior art references, as described in more detail below in Sections VII-IX. A6650-91; A6709-49. The CRU confirmed the patentability of two '902 claims – claims 91 and 104. A6750-51.

SSBG appealed the CRU's rejections to the BPAI and Cisco cross-appealed. A6764-66; A6772. SSBG sought reversal of the rejection of claims 68, 69, 71, 75,

[1] Prof. Sigram Schindler, one of the inventors of the '902 Patent, should be recognized for his significant contributions to Sections IV-VI.

77, 79, 82, 84, 87, 90, 92, 95, 98, 100, and 102. A7129-85. The BPAI issued its decision on March 23, 2012 affirming the decision of the CRU as to all claims, including confirming the validity of claims 91 and 104. A2-A4. Notably, the BPAI made no decision concerning Cisco's proposed invalidity rejections. A9 at n.8.

Cisco filed its Notice of Appeal from the decision of the BPAI on May 23, 2012 as to claims 91 and 104. A8303. SSBG thereafter filed a cross-appeal with respect to the rejection of the remaining claims. A8353-54.

That the CRU rejected nearly all the claims of the '902 Patent over multiple references, with the BPAI affirming, raises the question of how the USPTO could have issued a patent so allegedly incredibly invalid? The answer is that the USPTO originally did not issue an invalid patent. And even stronger: Based on the same specification and the claims dealing with exactly the same subject matter – namely, telephone calls over a packet-switching network and guaranteeing their real-time quality by instant change-over to a line-switching network if this quality is threatened to be lost – the USPTO granted to SSBG three additional, related patents (US 7,483,431 B1, which was recently allowed in reissue; US 7,963751 B2; and, US 8,175,083 B2). The allowance of those three related patents explicitly confirms the patentability of the claimed '902 invention, though elaborating on differing scenarios, the USPTO was well aware of the CRU's and BPAI's

decisions below and of the Delaware court's decisions as to the claimed '902 invention.

How this clash within the USPTO could occur is evident: SSBG shows below that the CRU's/BPAI's claim construction directly contradicts this Court's *en banc* decision in *Phillips v. AWH Corp*., 415 F.3d 1303 (Fed. Cir. 2005), as well as the Supreme Court's decision in *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289 (2012). The Examiner must obey them, as outlined in the USPTO's "Interim Procedure" guidance to the Examining Corp. on how to apply *Mayo*: "Claim analysis begins by identifying and evaluating each claim limitation. . . ."[2]

The *Phillips* decision, just as the USPTO's "Interim Procedure," clearly states that claim interpretation has to be performed by using the meanings of the claim's wording as understood by the person of pertinent ordinary skill in the light of the specification. *Phillips*, 415 F.3d at 1313. This is discussed in detail in Section VI.

Nevertheless the CRU/BPAI applies the layman's "broadest possible reasonable interpretation" rule to the '902 claims' wordings and completely ignores the skilled person's reasonable understanding of their terms, *i.e.*, is totally

[2] Andrew H. Hirshfeld, *2012 Interim Procedure for Subject Matter Eligibility Analysis of Process Claims Involving Laws of Nature*, USPTO, 2 (July 3, 2012), http://www.uspto.gov/patents/law/exam/2012_interim_guidance.pdf.

unreasonable for the skilled person. A6625-35; A18-24. Examples of such misinterpretations are the terms – representing "inventive concepts"[3]:

(a) "Communications connection of a Telephone Call";

(b) nearly "Proactive Signal";

(c) real-time quality preserving "Change-Over of an Individual Communications Connection"; and,

(d) "Practicable on any Packet- and any Line-switching Network",

on the meanings of which the '902 claims are based. They are elaborated on by the "Legal Facts" section below in its list of "inventive concepts" **(a)**-**(d)**.

Due to this layman's and hence incorrect claim construction, the CRU/BPAI arrived at a scope of the '902 claims so broad that was overly broad. In fact, that construction was so broad as to encompass dozens of prior art data transfer techniques – if only dealing with a network change-over – *i.e.*, even comprises all those data transfer techniques explicitly excluded by the '902 specification as already being prior art and hence not within the scope of the claimed '902 invention. Such totally layman-minded constructions, instead of the understanding

[3] *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1294 (2012), requires that the "inventive concepts" for the claimed invention be identified before construing claims.

of the skilled person, clearly contradicts what § 112 requires to be tested, as prescribed by this Court's *Phillips* decision (*see* Section VI, *infra.*).

This Court confirmed its *Philips* decision implicitly in its *Bancorp* decision[4] by emphasizing that, as a rule, a § 112 test should be performed prior to a § 101 check.[5] This rule should have been used by the BPAI, thereby providing an objective baseline from which to begin claim interpretation. *See Innova/Pure Water, Inc. v. Safari Water Filtration Systems, Inc.*, 381 F.3d 1111, 1116 (Fed. Cir. 2004).

Once the BPAI committed this error in claim construction, it consequentially considered the claims to be invalid. Then the incorrect '902 claim interpretations (according to the *Philips* decision), outlined by the inventive concepts **(a)-(d),** make a "night and day" difference: While under the claimed invention's layman interpretation the several prior art references appear to invalidate certain claims, under the claim interpretation by the person of pertinent ordinary skill, none of the several prior art references discloses the claimed invention of the '902 patent. Notably, although telephony is by far the most important telecommunications

[4] *Bancorp Servs., L.L.C. v. Sun Life Assurance Co.*, 687 F.3d 1266 (Fed. Cir. 2012).

[5] "It will ordinarily be desirable -- and often necessary -- to resolve claim construction disputes prior to a § 101 analysis, for the determination of patent eligibility determines a full understanding of the basic character of the claimed subject matter." *Bancorp*, 687 F.3d at 1273-74.

application, none of the five prior art references ever mentions changing over a telephone call! Indeed, only one of them ("Jonas") discloses a single one of these four '902 inventive concepts – the other four references disclose absolutely none of the inventive concepts. A *Philips*-conforming interpretation of the claims would have resulted in a repudiation of Cisco's proffered invalidity allegations.

Finally, this paragraph provides a preview of this brief's sections. SSBG is seeking relief from the CRU's/BPAI's legally erroneous interpretation of the '902 claims. SSBG explains that this claim interpretation directly violates the requirements imposed on the BPAI by the *Phillips* decision and in particular by the *Mayo* decision, in Section V. Section VI summarizes the reasons for the existence of legal as well as technical facts. Then Sections VII and VIII elaborate on the technical facts underlying the erroneous application of the § 112 test to the '902 claims and the "lack of substantial evidence" in the BPAI decision, respectively. More specifically, the claimed invention of the '902 Patent is not invalid over the five prior art references applied by the CRU/BPAI. Section IX states the relief requested by this brief.

V. STATEMENT OF THE FACTS

Section A herein describes the problem of Internet telephony and the solution to it provided by the claimed '902 invention. Section B then identifies four of the legal facts established by the claimed '902 invention, i.e., four of its

inventive concepts, as implied by this Court's Phillips decision and explicitly asked for by the Supreme Court's Mayo decision; Section B hence has the heading "Legal Facts of the '902 Invention". The technical meanings of these inventive concepts are elaborated on in Section C "The Respective Technical Facts of the '902 Invention"; these technical meanings provide the basis for the "non substantial evidence" critique of the BPAI's decision in Section VII and VIII. Finally Section D outlines that only a single one of these five prior art references relied upon by the BPAI discloses only a single one of these four inventive technical facts identified in Section B and described in Section C.

A. <u>The Problem of Internet Telephony and its '902 Solution.</u>

1. Internet Telephony and its Lack-of-Quality Problem.

When first introduced on the market in the early 1990s – accompanied by hundreds of millions of dollars spent by industry for marketing Internet telephony – Internet telephony flopped completely. A9404 at ¶ 9. The reason was that Internet telephony suffered from commonly-known, unacceptable "lack of quality" problems. *Id.* This lack of quality manifested itself by two big problems: **i)** Call establishments often totally failed **<u>and/or</u> ii)** in established calls delays and jitter in the voice data transfer were unacceptably high.

Consequently, by the middle of the 1990s, it finally became apparent that the cost advantage of Internet telephony could not compensate for its then lack of quality. *Id.* at ¶¶ 8-9.

2. The Claimed '902 Solution to this Lack-of-Quality Problem.

The problem was actively solved by the fundamental invention in the '902 Patent. This solution was implemented and publicly demonstrated by TELES AG at several worldwide leading telecommunication shows in 1996-1999. A9403 at ¶¶ 3-4. The fundamental invention completely eliminated both problems **i)** and **ii)**, described above. This fundamental invention is to permanently monitor, in any one of a number of different ways, the bandwidth of the data transfer in the communications connection of the Internet telephone call and instantly perform a change-over of the communications connection to the line-switched network (*i.e.*, either the Public Switched Telephone Network ("PSTN") or an Integrated Services Digital Network ("ISDN")) as soon as this monitoring detects the bandwidth of a transfer is understepping or exceeding a certain threshold and/or encounters a time delay when forwarding IP data packets. A4195 at col. 9, l. 41-58.

But, the '902's solution was not accepted by the market, at that time. A9404 at ¶ 6. This '902 technology was considered by the market to be technically too sophisticated, just like a passenger of a low-cost flight changing-over during a

flight to a regular-cost carrier's flight – and administratively too complex. *Id.* By the end of the 1990s, Internet telephony was dead. *Id.* at ¶ 9.

Yet, in 2000, Cisco tried re-launching Internet telephony, but by using the claimed '902 invention to solve the first big problem **i)**. *See* A9405 at ¶ 11. And this '902 technology – together with the fast progress in IT and Cisco later using the claimed '902 technology for also solving the second big problem **ii)** – made IP telephony a success story in the market. Internet telephony was renamed as VoIP ("voice over IP") to disassociate itself from the initial deficiencies. *Id.* Today, the '902 technology is used by virtually all manufacturers of telephony equipment. *See* A9405-06 at ¶¶ 12-14.

Cisco, when told that its new telephony products would infringe TELES's related European patent – which has the same specification as the later issued US '902 Patent – then denied that they used the '902 technology. (Today many of Cisco's marketing flyers proudly stress that they do use it.) At the same time, Cisco launched invalidity challenges against that European patent and later also against the related '453 and '902 US patents. In these attacks, Cisco came up with erroneous '902 claim constructions, which later were adopted by the BPAI.

B. Legal Facts of the '902 Invention.

It is worthwhile noticing that the below list of "inventive concepts" **(a)-(d)** identifies – starting from the presentation of the prior art in the '902 specification –

just four of the many more inventive concepts of the claimed '902 invention, as disclosed by its specification.[6] To identify a claimed invention by its "inventive concepts" – as the basis for legally deciding about its patentability, *i.e.*, for enabling a court to apply to it the §§ 102/103 tests – has been explicitly asked for by the Supreme Court's *Mayo* decision (also for its test under § 101). *Mayo*, 132 S. Ct. at 1294.

For providing this basis for clarifying the inventivity/creativity of the '902 invention – "creativity", implicitly being asked for by the Supreme Court's *KSR* decision already (*KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727 (2007)), is a synonym of the more recent term "inventivity", represented by the inventive concepts asked for by the *Mayo* decision. Section B proceeds exactly this way; it subsequently identifies these legal facts alias inventive concepts, on which the '902 invention is based and shows where they are disclosed by the '902 specification to be underlying all '902 claims (see Section VI).

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[6] The claimed '902 invention includes several other inventive concepts which do not need to be addressed in detail, but which are nonetheless important: (e) "it is always initiated over the Internet" (*see, e.g.*, A4192 at col. 3, ll. 35-39; *id.* at col. 4, ll. 27-36; A4194 at col. 8, ll. 5-13); (f) "it has always the same bandwidth and urgency requirements" (*see, e.g.*, A4191 at col. 2, ll. 18-25); and (g) "it always requires a claimed switch at the called party" (*see, e.g.*, A4192 at col. 3, ll. 47-57). This complete analysis would have to be applied, if the '902 invention would be made subject also of the "non abstract idea" test that SSBG suggested in its Amicus Briefs to this court in its *CLS Bank v. Alice Corp.* case and to the Supreme Court in its *Association for Molecular Pathology, et. al. v. Myriad Genetics, Inc., et. al.* case.

(a) "**Communications connection of a telephone call over the Internet**". This inventive '902 concept – mentioned by no prior document (see Section C) – describes properties of a telephone call over the Internet. Namely, to be:

- an end-terminal-to-end-terminal connection (more precisely: an end-terminal-user-to-end-terminal-user connection, as an end-terminal "telephone" does not "communicate" with another telephone, but just "interacts" with it, as understood by the person of ordinary skill, according to the ISO-OSI-Reference Model[7]), and
- concerned with initializing a telephone call over the Internet and then realizing a real-time data transfer between these end-terminals suitable for telephony, as soon as this call is established. The latter means for the person of ordinary skill: Guaranteeing an end-terminal-to-end-terminal data transfer of bandwidth of a delay of maximally 0.5 seconds.

A4191 at col. 2, ll. 19-25.

(b) "**Proactive Signal**". This inventive '902 concept – also not mentioned by any prior document (*see* Section C) – describes a property of the control command triggering the change-over of the telephone call. Namely, to be

[7] The "Open Systems Interconnection Reference Model (OSI-RM)" is agreed on by all worldwide giant standardization bodies, such as ISO, ITU-T, IEEE, IEC, IETF, and their national counterparts, *e.g.*, the ANSI, DIN, AFNOR, BSI, NTT. A1571-1579. It overarches much of telecommunications' pertinent skill.

automatically released as soon as the monitoring of the data transfer of the communications connection of the telephone call indicates that in a point monitored – *e.g.*, a buffer monitored in one of its two switches – a defect in this data transfer is detected. *See, e.g.*, A4195 at col. 9, ll. 41-47.

(c) "**Real-time change over of a communications connection**". This inventive '902 concept – also not mentioned by any prior art document (see Section C) – describes the property of a communications connection, to be able to:

- anytime instantly change-over from a packet-switching to a line-switching network, in particular without necessarily first establishing another hand-shaking protocol (e.g., X.25, TCP, VT.100) between the connected end-terminals or systems the communications connection traverses, and
- be changed-over individually, *i.e.*, without forcing by its change-over another communications connection also to change-over.

See, e.g., A4195 at col. 9, ll. 48-55.

(d) "**Practicable of the '902 invention on any line- and any packet-switching network**". This inventive '902 concept – not disclosed by Focsaneanu, Matsukawa, and Yoshida (*see* Section C) – describes the property of the '902 data transfer technique, to be practicable on any packet-switching network and any line-switching network, to which its two switches may simultaneously be connected. *See, e.g.*, A4193 at col. 6, ll. 52-56.

C. The Respective Technical Facts of the ‘902 Invention.

The functionalities of the above four inventive ‘902 concepts are specified by their disclosures in the ‘902 specification, as identified in the preceding Section.

Additionally, the meaning of any one of these four inventive concepts embodied by the ‘902 invention is subsequently illustrated by a kind of real life metaphor for it, put as “from … to … ,” for brevity called a metaphor. Presenting their meanings in that flowery language greatly facilitates immediately recognizing that any one of these inventive concepts describes a substantial improvement achieved by the claimed ‘902 invention over the state of the prior art referred to, i.e., that the claimed ‘902 invention is really inventive/creative.

(a') The improvement described by the inventive ‘902 concept “Communications connection of a telephone call over the Internet” is illustrated by the metaphor “from dream to reality”. This metaphor for said inventive concept namely conveys that the claimed ‘902 invention:

- terminates the longtime existing “dream” – indeed being a misbelief – that a telephone call over the Internet works already fine if only the Internet works fine, and that it instead
- takes into account the “reality”, i.e., that also the other devices outside of the Internet necessary for the technically much more complex establishment of the communications connection of an Internet telephone

call (than of the one of a classical telephone call) must work correctly, in particular its two ‘902 switches. At the ‘902 priority date that requirement was not considered due to the additional and then expensive resources it implied for Internet telephony (by contrast to classical telephony), e.g., enough buffer space and appropriate compression/decompression chips.

(b') The improvement described by the inventive ‘902 concept of “Proactive Signal” is illustrated by the metaphor “from inflatable life vest to air bag”. This metaphor for said inventive concept conveys that the claimed ‘902 invention:

- does not wait to release the change-over command until a loss of the quality of the telephone call has occurred – and until then does not wait like a “life preserver” that said loss actually occurs and only then releases the change-over command, just like a “life vest” is inflated only after having landed on water –
- but proactively releases the change-over command as soon as some monitoring of the data transfer for the telephone call detects somewhere therein – i.e., in the communications connection at issue – a thread of loss of quality, as there is a problem with its bandwidth or packet forwarding, just like an “air bag” in a car goes off if a sensor detects a threat of accident.

- That is, the Proactive Signal inventive concept says that in the claimed ‘902 invention the change-over of the data transfer of the communications connection of an Internet call goes off prior to any loss of quality occurring therein. Sometimes this even may happen although this loss would not have occurred at all – as the problem detected would by its own have disappeared a few milliseconds after that point in time of releasing the ‘902 change-over command.

(c') The improvement described by the inventive ‘902 concept “Real-time change over of a communications connection” is illustrated by the metaphor “from mass transit to individual transit.” This metaphor for said inventive concept conveys that the claimed ‘902 invention:

- does not exert just mass transit between ‘902 switches, i.e., does not uniformly route anonymous traffic between them over the one or the other network they both are connected to and make this mass transit change-over if signaled, but
- keeps track, within this anonymous mass transit, of any individual communications connection subject to ‘902 control, and makes it being changed-over if so signaled – but without thereby enforcing any other communications connection to also change-over.

(d') The improvement described by the inventive ‘902 concept “Practicable on any line- and any packet-switching network” is illustrated by the metaphor “from self-fertilization to cross-fertilization”. This metaphor for said inventive concept conveys the message that the claimed ‘902 invention

- does not afford itself the comfort of being applicable only on a packet-switching network, which is also capable of controlling the line-switching network (= “self-fertilization”). This “self-fertilization” interpretation, for example, would view an ISDN as a packet-switching network and a separate line-switching network – a view contrary to the view of a person of ordinary skill, which always understands the ISDN to be a single line-switching network (though it may provide to its users some packet-switching functions for data transfer). Consequently the ‘902 specification explicitly excludes the use of an ISDN’s D-channel for its data channel. A4193 at col. 5, ll. 2-3.
- but is subject to the important independent limitation that it may be practiced by any packet-switching network, which to this end may pair with any line-switching network (= cross-fertilization).

In biology, this metaphor is reality and distinguishes species of low adaptability to changing environments of biological life from species of high such

adaptability – the claimed ‘902 invention is a data transfer technique of high adaptability to changing environments of telecommunications techniques.

D. The Technical Facts of the ‘902 Invention and of the Prior Art.

This section is not really needed because the primary purpose of this appeal is to get relief from the BPAI’s legally incorrect interpretation of the ‘902 claims under 35 USC § 112. The legal incorrectness of the claim interpretation of the BPAI is not to have obeyed the legal limitations that the Phillips decision and, in particular, the Mayo decision impose on claim interpretation, i.e., on testing a claim as to an invention under § 112. The BPAI decision provides no indication that it attempted to obey these indispensable legal limitations.

Nevertheless, this Section D indicates that the ‘902 technical facts prove the “lack of substantial evidence” supporting the BPAI decision, which found all but two of the ‘902 claims invalid over five prior art references.

In more detail, Section D shows that of the five prior art references relied on by the BPAI only a single reference discloses but a single one of the four inventive concepts (a)-(d) (disclosed by the ‘902 specification as identified in Section A).8

As the inventive concepts (a)-(d) are independent, this in principle logically implies: No combination of the prior art references can disclose a concept which

[8] Only Jonas disclosed one such inventive concept, namely **(d)**.

none of them embodies, i.e., only a single one of the inventive concepts (a)-(c). And more importantly: No combination of the prior art references can disclose the totality of all four inventive concepts (a)-(d), as would be necessary for any of the five prior art references to invalidate the '902 invention.

Where the BPAI finds otherwise, this is due – leaving aside its incorrect claim interpretation (as explained in Section IV) – to its failure to recognize the lack of substantial evidence supporting its findings. This is shown in detail in Sections VII and VIII.

1. Farese (U.S. Pat. No. 4,996,685).

Farese discloses an ISDN access system, which enables one or several user PCs to access an ISDN and establish over it communications connections to Host computers, also connected to an ISDN. A3915 at Abstract.

Of the four inventive '902 concepts **(a)-(d)**, Farese cannot disclose

(a) as it discloses no end-terminals enabling their users to telephone calls,

(b) as its only change-over signal is not proactively issued by the first switch,

(c) as it ignores the delay times on his individual communications connections,

(d) as it has no switch capable of interacting with a non-ISDN network.

A7160-64.

2. Yoshida (U.S. Pat. No. 5,347,516).

Yoshida discloses an ISDN access system, which enables a LAN to access an ISDN and establish over it network connections to another ISDN access system. A3872 at Abstract.

Of the four inventive '902 concepts **(a)-(d)**, Yoshida cannot disclose

(a) as it ignores end-terminal-to-end-terminal connections

(b) as it discloses no communications connection individual change-over signal,

(c) as it ignores the delay times on an individual communications connection,

(d) as it has no switch capable of interacting with a non-ISDN network.

A7167-71.

3. Matsukawa (U.S. Pat. No. 5,598,411).

Matsukawa discloses an ISDN access system, which enables an ISDN terminal adapter to access an ISDN and establish over it network connections to another such system. A3899 at Abstract.

Of the four inventive '902 concepts **(a)-(d)**, Matsukawa cannot disclose

(a) as it ignores end-terminal-to-end-terminal/communications connections,

(b) as it discloses no communications connection individual change-oversignal,

(c) as it ignores the delay times on an individual communications connection,

(d) as it has no switch capable of interacting with a non-ISDN network.

A7164-67.

4. Jonas (U.S. Pat. No. 6,137,792).

Jonas discloses a method to allow secure and accelerated transmission of security-critical and/or time-critical application information data packets from a source computer to a destination computer. A3453 at col. 3, ll. 26-34. The source and destination computers – not showing their end-terminals – are connected via respective source and destination routers to a packet-switched network. *Id.* at 4:1-36. The source router is also capable of establishing a bypass connection to the destination router over a circuit-switched telephony network. *Id.* It is worth noting that Jonas, too, considers ISDN to be a circuit-switched network, separate and distinct from any IP network. *Id.*

Of the four inventive '902 concepts **(a)-(d)**, Jonas cannot disclose

(a) as it ignores end-terminals and end-terminal-to-end-terminal connections,

(b) as it knows no communications connection individual change-over signal,

(c) as it ignores the delay times on an individual communications connection.

A7154-60.

5. Focsaneanu (U.S. Pat. No. 5,610,910).

Focsaneanu's invention deals with a network access module providing to a variety of end-terminals on its off-network side access to a variety of networks. A3422 at Abstract.

Of the four inventive ‘902 concepts **(a)-(d)**, Focsaneanu cannot disclose

(a) as it ignores end-terminal-to-end-terminal connections,

(b) as it has no change-over signal whatsoever,

(c) as it ignores delay times on an individual communications connection,

(d) as it discloses no second switch required for executing the ‘902 invention.

A7194-97.

VI. SUMMARY OF THE ARGUMENT

As stated numerous times above, this appeal seeks relief from the BPAI’s ignoring – in its interpretation of the ‘902 claims – the decisive legal limitations imposed on claim interpretation by this Court’s Phillips decision and in particular the Supreme Court’s Mayo decision.

As back-up, i.e., if the Court should not decide that the BPAI’s decision is legally untenable, this appeal maintains that the BPAI decision, other than with respect to claims 91 and 104, suffers from a “lack of substantial evidence.” This appeal’s fallback position as to technical facts is based on commonly known technical grounds, as elaborated on in Sections VII and VIII.

Yet, some principal remarks seem to be in place, as this appeal’s primary complaint – about the BPAI having totally ignored this Court’s Phillips decision and the Supreme Court’s Mayo decision as to claim construction – is based on legal grounds, the various aspects of which again and again are often challenged, in

particular by contentious parties in patent disputes and by the District Courts deciding them. In this case, the BPAI ignores these decisions, likely unintentionally.

Such questions as to the substantial responsibilities of this Court and the Supreme Court in determining the rules of claim interpretation, i.e., of how to apply 35 USC § 112, usually are case specific – while these far reaching responsibilities of this and the Supreme Court are caused and driven by the U.S. Constitution and its intent to establish, in substance, a country-wide uniform patent jurisprudence and to keep it in synchrony with the needs of society. This affects, first of all, the rules for applying a claimed invention's § 112 test.

As to this legal test's application rules, both just quoted decisions are landmark events on the way of taking care of this responsibility. The most recent step forward in providing firm ground, the Mayo decision, neatly complements the Phillips decision: The meaning of the decisive statements in the Phillips decision (which are "The inquiry into how a person of ordinary skill in the art understands a claim term provides an objective baseline from which to begin claim interpretation." (415 F.3d at 1313) and "claims must be read in view of the specification, of which they are part"(415 F.3d at 1315, quoting Markman v. Westview Instruments, Inc., 52 F.3d 967, 978 (Fed. Cir. 1995) (en banc), aff'd, 116 S. Ct. 1384 (1996))) is – as to the meaning of the term baseline in view of the

specification – further elaborated on by the Mayo decision. Namely: The Mayo decision held that a "baseline" has to be identified, in view of the specification, by identifying the "inventive concepts" of the claimed invention as disclosed by the patent's specification[9] – these then are the "legal facts" of the claimed invention. *Mayo*'s tests under §§ 112, 102, 103, and eventually 101, then determine whether its inventive concepts – any one representing at least one legal and at least one technical fact – meet these four Sections' requirements over pertinent ordinary skill and prior art.

Thus, the *Mayo* decision filled an important notional/definitional/ terminological gap in patent precedents – left open in the Phillips decision – as how advanced IT (e.g., Knowledge Representation, Natural Language Research) would do it.

VII. STANDARD OF REVIEW

This Court's standard of review of a decision of the BPAI is set forth in the Administrative Procedure Act, 5 U.S.C. § 706. *Dickinson v. Zurko*, 527 U.S. 150, 154 (1999). This Court reviews the BPAI's conclusions of law, including claim interpretation, de novo. *See, e.g., Stevens v. Tamai*, 366 F.3d 1325, 1330 (Fed. Cir. 2004); *In re Stepan Co.*, 660 F.3d 1341, 1343 (Fed. Cir. 2011) (*citing In re Pacer*

[9] *Mayo*, 132 S.Ct. at 1294.

Tech., 338 F.3d 1348, 1349 (Fed. Cir. 2003). Under that statutory provision, the Court will set aside factual findings that are "unsupported by substantial evidence." 5 U.S.C. § 706 (2000); *In re Gartside*, 203 F.3d 1305, 1316 (Fed. Cir. 2000).

The "substantial evidence" standard asks whether a reasonable fact finder could have arrived at the decision. The "substantial evidence" standard is considered to be a less deferential review standard than "arbitrary, capricious." The Supreme Court has described "substantial evidence" as follows:

> Substantial evidence is more than a mere scintilla. It means such relevant evidence as a reasonable mind might accept as adequate to support a conclusion. . . . Mere uncorroborated hearsay or rumor does not constitute substantial evidence.

Consolidated Edison Co. v. NLRB, 305 U.S. 197, 229-30 (1938). The Supreme Court has emphasized that "substantial evidence" review involves examination of the record as a whole, taking into account evidence both that justifies and detracts from an agency's decision. See Universal Camera Corp. v. NLRB, 340 U.S. 474, 487-88 (1951).

VIII. ARGUMENT

A. The BPAI's Interpretations of the Several Terms were Legally Incorrect.

1. The BPAI's Interpretation of the Term "Packet- and Line-Switching Network" was Legally Incorrect.

Upon *de novo* review, the Court should overturn the BPAI's interpretation of the claim term "Packet- and Line-switching Network." As interpreted by the ordinary and customary meaning of the terms from a person having skill in the pertinent art, the packet-switched network (*e.g.*, the Internet) and the line-switched network (*e.g.*, the PSTN and/or ISDN) of the claims of the '902 Patent are two independent and distinct networks. In other words, the claims require two independent and distinct networks. The BPAI committed legal error by adopting the Examiner's interpretation that the claimed networks of the '902 Patent could be met by a disclosure of a single ISDN network. Based on its improper interpretation of the term "Packet- and Line-switching Network," the BPAI erred as a matter of law in finding that Farese, Yoshida, and Matsukawa disclose the same "Packet- and Line-switching Network" as claimed.

The '902 Patent makes clear that two independent and distinct networks are required to make up the "Packet- and Line-switching Network": one being a packet-switched network, such as the Internet; and the other being a line-switched network, such as the PSTN or ISDN. *See, e.g.*, A4194 at col. 7, ll. 49-52. They are "quite different[]" from each other. A4191 at col. 1, l. 67—col. 2, l. 4. The

‘902 Patent is directed to switching over from one network to the other network when necessary, so two networks are required.

The BPAI based its claim interpretation of “network” on the following factual findings:

> FF1. The Specification of the '902 Patent provides that "[i]t is thus possible to divide up a single coupling network depending, on requirements, dynamically into a line-switching network and a packet-switching network" (col. 3, 11. 10-13).
>
> FF2. The Specification of the '902 Patent provides that "[t]hus compared with a packet-switching transfer to the access point (e.g., through an ISDN D channel), which is also possible, a larger and fixed bandwidth is ensured up to the access point" (col. 4, 1. 66 - col. 5, 1. 2).

A19-20; A9.

Concerning FF1, the cited passage from the ‘902 Patent relates to a discussion of a prior art patent, U.S. Pat. No. 4,903,260 (“the ‘260 Patent”). *See* A4192 at col. 3, ll. 1-13. As stated in FF1, the ‘260 Patent discloses a way to dynamically divide a single switching network into a circuit-switching network and a packet-switching network, which simultaneously coexist for a period of time. The ‘260 Patent does not disclose a way of consecutively using two networks being completely independent of each other, a packet-switching and a circuit-switching one – *i.e.*, not sharing the same LSI modules – in a single call *alias* “data transfer,” which is the subject of the ‘902 Patent. The discussion of the prior art

‘260 Patent provides a backdrop to the disclosure of the ‘902 Patent, but it does not define the invention or the “network” of the ‘902 Patent. When a Specification describes the inferiority of the prior art, the scope of the claims does not include the inferior prior art. *See, e.g., Tronzo v. Biomet, Inc.*, 156 F.3d. 1154 (Fed. Cir. 1998). Notably, the ‘260 Patent does not mention the BPAI’s (incorrect) notion that the LSI chips of the ‘260 Patent could be used for merging the packet-switching SS7-protocol-based “signaling functionality” of the ISDN (and of most PSTNs in the US in use presently) with these networks’ line-switching “payload functionality.” Any attempt to perform such a merger of functionalities within a single network would, due to its uncontrollable complexity, end-up in a nightmare for the service provider attempting to use such an integrated technology. In other words, the BPAI’s incorrect and unsupported claim interpretation of “network” in the context of the ‘902 Patent is based on an unreasonable and unsupported interpretation of the ‘260 Patent.

Concerning FF2, the cited passage from the ‘902 Patent relates to a data transfer from the first switch to the access point to the packet-switching network. *See* A4192-93 at col. 4, l. 64 - col. 5, l. 6. There are two key points from this passage of the ‘902 Patent. First, while the ‘902 patent states that a packet-switching transfer to the access point is possible over an ISDN D channel, the ‘902 Patent clearly disavows the use of the D channel. Indeed, the very next sentence of

the ‘902 Patent states that when an ISDN network is used, only the B channel is used to send data. A4193 at col. 5, ll. 2-6 (“If an ISDN network exists, then an ISDN B channel is used as the data channel.”). *Phillips* recognized that, in certain situations, the specification may reveal that the inventor intended to disavow certain claim scope. *Phillips*, 415 F.3d at 1316. In such cases, the claim should be construed more narrowly than it otherwise would to give effect to the inventor's intent to disavow a broader claim scope. *Id.; Honeywell Int'l, Inc. v. ITT Indus., Inc.*, 452 F.3d 1312, 1319-20 (Fed. Cir. 2006); *SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc.*, 242 F.3d 1337, 1342-44 (Fed. Cir. 2001). Thus, there can be no reasonable interpretation, even under the broadest reasonable interpretation rubric, that the D channel and the B channel constitute the packet-switching network and the line-switching network, respectively, used by the invention of the ‘902 Patent. If anything, the ‘902 Patent actually teaches away from the use of the D channel as a packet-switched network. Second, as mentioned, the passage from the ‘902 Patent relied upon by the BPAI in FF2 concerns a data transfer to the packet-switching network. The ‘902 Patent states that the D channel is not used as a medium to get to the packet-switched network.[10] A4193 at col. 5, ll. 2-6.

[10] Indeed, the invention’s only use of the ISDN D channel is to establish a communications connection over the line-switched ISDN/PSTN network. A4195 at col. 9, ll. 48-58. The reference in the cited passage to “the ISDN signaling command SETUP” requires that the D channel is used, as the D channel is known

Therefore, this unused D channel cannot be the "packet-switched network" as defined by the '902 Patent. The '902 Patent goes on to state that the B channel, not the D channel, is used as a medium to get to the access point to the packet-switched network. *Id.* Thus, additionally, neither the B channel nor the D channel can constitute the packet-switched network, as during this transfer over the B channel or (possibly, but outside the scope of the invention) the D channel, the data has not yet reached the packet-switched network – a network separate and distinct from either of the ISDN channels.

The BPAI's analysis also acknowledged that an ISDN network is conventionally known as a "line-switched network." A20. However, the BPAI determined that this does not mean that the networks in the claims of the '902 Patent cannot be read onto a single ISDN network under the broadest reasonable interpretation. *Id.* The BPAI's conclusion is incorrect. The BPAI's analysis hinged on two factors: the first being that the '902 Patent does not have specific definitions that would illustrate that the Examiner's interpretation is overbroad and the second being that the Specification provides that the ISDN D channel can provide packet-switching. *Id.* The second factor has been discussed above, and it is clear from the teaching in the Specification that the ISDN D channel is not and

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per se to be the signaling channel for a line-switched ISDN/PSTN network. *Id.* The D channel is not the packet-switched network, but is only utilized to establish a line-switched connection.

can not be the packet-switched network of the claims, even when given their broadest reasonable interpretation.

Concerning the first factor, the BPAI and the Examiner are just mistaken. Their findings are not supported by substantial evidence. On the contrary, the Specification does contain a specific definition of the packet-switched network of the claims and does clearly distinguish the packet-switched network from an ISDN network, as discussed below. The BPAI improperly determined the meaning of the "packet-switching network" of the claims, by only considering the language of the claims and ignoring the disclosure of the Specification. *See Medrad, Inc. v. MRI Devices Corp.*, 401 F.3d 1313, 1319 (Fed. Cir. 2005) ("We cannot look at the ordinary meaning of the term . . . in a vacuum. Rather, we must look at the ordinary meaning in the context of the written description and the prosecution history.").

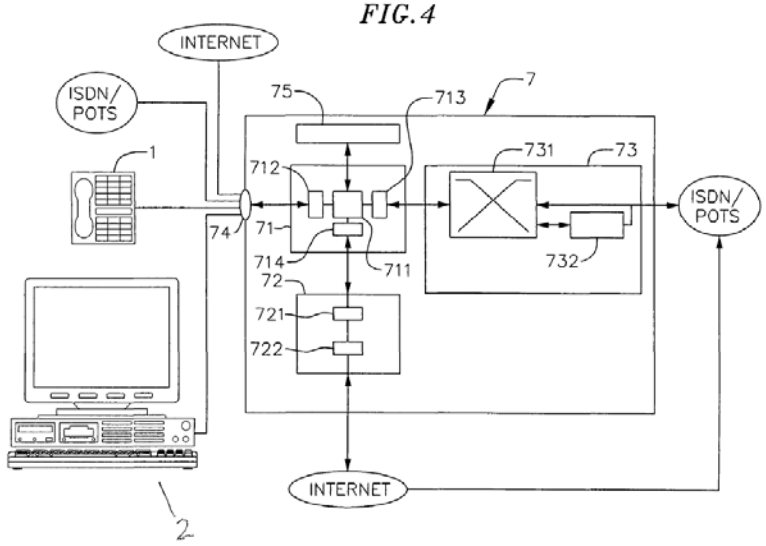
Specifically, the '902 Patent clearly requires two independent and distinct networks, where an ISDN network cannot constitute both networks.[11] The '902 Patent provides a definition of the packet-switched network, which does not include an ISDN network: "The Internet will now be considered as [the] packet-

[11] Claims 68, 69, 71, 75, 77, 79, 82, 84, 87, 90, 91, 92, 95, and 98 require switching between a "packet switching network" and a "line-switching network." Claims 100, 102, and 104 require switching between "the Internet" and "a public telephone network." A4199-A4202.

switching network without restricting the present invention. Indeed any packet-switching network could be used such as mobile phone networks within the scope of the present invention." A4193 at col. 6, ll. 52-55. This definition of the packet-switched network is distinct from the line-switching network, which is described in the Specification as "a conventional telecommunications network." *See id.* at col 6, ll. 40-51.[12] Thus, the patent describes two independent and distinct networks – (1) the Internet and (2) the ISDN/PSTN network. *See, e.g.*, A4194 at col. 7, ll. 49-52. Indeed, the patent consistently distinguishes between the packet-switched Internet network and the line-switched telephone (ISDN/POTS/PSTN) network. *See, e.g.*, *id.* at col. 8, ll. 26-31 ("a packet-switching network (Internet) and a line-switching network (telephone network)"); *id.* at 8:34-37 ("an ethernet interface" / "an ISDN interface"); *id.* at 8:42-58 ("IP switch 72" / "line switching device 73"). Figure 4, which diagrammatically shows a switch according to the invention, depicts the two distinct networks: (1) the Internet and (2) ISDN/POTS. A4188.

[12] This cited paragraph also demonstrates that the packet-switched network of the patent excludes a conventional telecommunications network, such as ISDN/POTS. The sentence beginning at line 48 discusses "[e]ntry to a packet-switching network." A4193 at col. 6, ll. 48-49. Thus, the ISDN/POTS line-switched network exists separately from the packet-switched network.

FIG. 4



While the BPAI acknowledged that an ISDN network is conventionally known as a line-switched network (A20), it failed to properly give weight to the disclosure of the Specification. The contrasting definitions and descriptions of the packet-switched network and the line-switched network make clear that the ISDN network described in the '902 Patent is a conventional ISDN network that is part of only the line-switched network of the patent. Further evidencing the distinction between the line-switched network and the packet-switched network, the Specification provides that in a line-switched network "a connection is continually provided in real time with the complete bandwidth of a channel between two points", while in a packet-switched network, "and quite differently from line-switching exchanges, a fixed connection does not have to be maintained. It is connection-less, *i.e.*, each packet is treated individually and not in conjunction with others." A4191 at col. 1, ll. 50-52; col. 2, ll. 1-4. This passage demonstrates that

an ISDN network is necessarily excluded from the definition of a packet-switched network.

In view of precedential case law, the BPAI's claim interpretation was erroneous. The BPAI should have begun its analysis by interpreting the claims in view of the specification using a section 112 analysis. *See Phillips*, 415 F.3d at 1311-1313. Had the BPAI first determined what "the applicant regards as his invention" and then interpreted the invention in view of the Specification, the BPAI would have arrived at a wholly different claim interpretation of "network" – one that would not be met by a single line-switched ISDN network. To begin with, the BPAI should have accorded the terms "packet-switching network" and "line-switching network" their ordinary and customary meaning. *See Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). Given their ordinary and customary meaning, a "line-switching network" would include an ISDN network, while a "packet-switching network" clearly could not. They are "quite different[]" from each other. A4191 at col. 1, l. 67—col. 2, l. 4.

This interpretation would also be in accordance with how a person of ordinary skill in the art understands the terms "line-switching network" and "packet-switching network." The only internationally sanctioned authority for defining this technology, the ITU-T (International Transport Union Telecommunications), determined in its international H.323 standard that ISDN is

a line-switching network ("Switched Circuitry Network, SCN"). A2213. Like the ITU-T standard, the '902 Patent describes and considers the ISDN network to be a line switched network. The patent does not ascribe a non-standard definition to the ISDN network. And, it was improper for the CRU/BPAI to interpret the Specification as describing a non-standard ISDN network. *See Multiform Desiccants Inc. v. Medzam Ltd.*, 113 F.3d 1473, 1477 (Fed. Cir. 1998) (Any special meaning assigned to a term "must be sufficiently clear in the specification that any departure from common usage would be so understood by a person of experience in the field of the invention."); *Merck* & Co. *v. Teva Pharms. USA, Inc.*, 395 F.3d 1364, 1370 (Fed. Cir. 2005) (citations omitted) (emphasizing the stringency of this requirement, especially in circumstances where the departure from common language would lead to a "counterintuitive" definition). The ISDN network, as used in the Specification and as commonly understood, is a line-switching network that is an alternative of a packet-switching network. *See, e.g.*, A4193 at col. 6-51 (describing "an ISDN/POTS line").

Additionally, the Specification makes clear that the Internet is required to be utilized by the switch claimed by the '902 Patent, such that the ISDN/POTS network alone cannot meet the requirement of two independent and distinct networks. *See, e.g.*, A4192 at col. 3, ll. 51-57. Certainly, there is no disclosure that a change-over, a requirement of the claims, occurs from one ISDN channel to

another ISDN channel. Indeed, as mentioned, the Specification states that if an ISDN network is used, only the B channel and not the D channel is used for data transfer. A4193 at col. 5, ll. 2-6. The Specification only describes a change-over from the Internet packet-switched network to the ISDN/POTS line-switched network. *See*, *e.g.*, A4192 at col. 4, ll. 27-36. Because the Internet must be the packet-switched network, the BPAI's interpretation that an ISDN network can constitute both the packet-switched and line-switched network is erroneous. Indeed, it was improper for the BPAI to ignore these guides in the Specification. *See Vitronics*, 90 F.3d at 1582 (The specification "is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.").

Finally, that line-switched-data and packet-switched-data can be transferred over one network is irrelevant for purposes of the two independent and distinct networks required by the '902 Patent claims. Indeed, the '902 Patent describes sending both types of data over an ISDN B-channel, as a preferred embodiment. A4192 at col. 4, l. 51—col. 5, l. 6. "This embodiment has the advantage that only one data channel is constantly engaged which, depending on the type of transfer, transfers data either to the access point to the packet-switching network, or to the other switch [over the line-switching network]." *Id.* at 4:56-60. In the context of the '902 Patent, sending either line-switched-data or packet-switched-data over

ISDN B-channels is **not** contemplated as the claimed change-over between two independent and distinct networks.

i) The Farese, Yoshida, and Matsukawa References Cannot Anticipate the Claims-at-Issue, under the Proper Claim Construction of the Term "Packet- and Line-Switching Network".

As a result of its improper construction of the term "Packet- and Line-Switching Network," the BPAI erred as a matter of law in finding that Farese, Yoshida, and Matsukawa disclose a "Packet- and Line-switching Network" as claimed. The Court should overturn the BPAI's construction and construe the "Packet- and Line-switching Network" term to require two independent and distinct networks: (1) a discrete packet-switched network, such as the Internet and (2) a discrete line-switched network, such as ISDN and/or POTS. A single ISDN connection cannot anticipate the claims. Thus, any reference that does not disclose a change-over between two independent and distinct networks cannot anticipate.

Accordingly, the Court should overturn the BPAI's findings concerning Farese, Yoshida, and Matsukawa. As these references only contemplate a single ISDN network, they cannot anticipate the two distinct networks of the '902 Patent. Additionally, these references are fundamentally different from the '902 Patent, as they do not disclose the use of / change-over between two distinct networks.

Further, as these references only disclose one network connection, as opposed to two, they are lacking structure for providing access to a packet-switched network.

Should the Court adopt this construction of the term "Network," only the Jonas reference would remain as a basis for the claims' rejection. And, as discussed below, Jonas does not anticipate the "Telephone Call" term.

2. The BPAI's Interpretation of the Term "Telephone Call"/"Data Transfer with Real-Time Properties" was Erroneous.

Upon *de novo* review, the Court should overturn the BPAI's interpretation of the claim terms "Telephone Call" / "Data Transfer with Real-Time Properties." As interpreted by the ordinary and customary meaning of the terms from a person having skill in the pertinent art in accordance with the teachings of the Specification, the telephone call and the data transfer with real-time properties should be construed as end-terminal-to-end-terminal communications connections with a communications time delay of less than 0.5 seconds. In other words, the claims require a specific type of data transfer and exclude the transfer of anonymous bulk data with unspecified/non-real-time time delay requirements. The BPAI's interpretation of the terms was erroneous as it failed to properly consider the Specification when construing the terms. *See Phillips*, 415 F.3d at 1313.

All claims-at-issue require either the routing of a telephone call or a data transfer with real-time properties.[13] As part of its claim interpretation, the BPAI stated that "if a cited reference details a structure capable of sustaining a telephone call or providing real-time properties in keeping with the Specification [of the '902 Patent] (FF3), then that cited reference meets the requirements of the claims for 'a telephone call' and/or 'real-time properties.'" A21-A22. While SSBG does not disagree with this statement, the BPAI failed to give sufficient weight to the cited disclosure of the Specification in construing the terms.

In particular, the BPAI acknowledged that the Specification provides, FF3:

> With Internet telephony, a cost-conscious caller uses the normal Internet with approximately 8 kbit/s bandwidth and a time delay of 0.5 seconds. When the Internet is overloaded, the time delay of the individual packets becomes so great that an acceptable conversation connection between telephone partners is no longer possible.

A10; A4191 at col. 2, ll. 18-25. This disclosure of the Specification requires that the terms "Telephone Call" / "Data Transfer with Real-Time Properties" necessarily excludes data transfers with communications time delay of more than 0.5 seconds. This disclosure clearly provides upward limitations on the acceptable time delay of the telephone call, such that a cited reference must be capable of

[13] Claims 68, 69, 71, 75, 77, 79, and 82 require the routing of a telephone call. Claims 84, 87, 90, 91, 92, 95, 98, 100, 102, and 104 require a data transfer with real-time properties. A4199-A4202.

operating within this bound to anticipate. Accordingly, the terms must be construed to include this data limitation as a requirements of the terms. The BPAI's failure to find this data limitation to be a requirement of the terms was legal error.

Similarly, in reaching its improper claim interpretation of the terms, the BPAI incorrectly excluded the innovative concepts relating to these terms. First, the FF3 disclosure is specifically aimed at a telephone call (IP telephony over the Internet or traditional telephony over the fallback ISDN/POTS network), which is something separate and distinct from any type of bulk traffic sent over the Internet. *See, e.g.*, A4191 at col. 2, ll. 19-25. Second, the FF3 disclosure is specifically aimed at a conversation between telephone partners, which necessarily implies an end-to-end communication between end terminals, as opposed to access points or the like. *See id.* A connection between an end terminal and a network adapter cannot comprise a telephone call. Such an interpretation is clearly unreasonable.

The BPAI's improper claim interpretation resulted in a construction for the terms that far exceeded the "broadest reasonable" scope of the claims. Because of its unreasonable claim interpretation, the BPAI found that the Matsukawa and Jonas references were anticipatory prior art. This is clearly incorrect as neither relates to, let alone even mentions, a telephone call in their disclosure. In sum, the claims-at-issue, which are directed to an apparatus for carrying a telephone call,

cannot be anticipated by a reference, such as either Matsukawa or Jonas, that does not disclose any structure capable of sustaining a telephone call anywhere in its four corners.

i) The Matsukawa and Jonas References Cannot Anticipate the Claims-at-Issue, under the Proper Claim Construction of the Term "Telephone Call"/"Data Transfer With Real-Time Properties".

As a result of its improper construction of the terms "Telephone Call" / "Data Transfer with Real-Time Properties," the BPAI erred as a matter of law in finding that Matsukawa and Jonas disclose a "Telephone Call" as claimed. The Court should overturn the BPAI's construction and construe the terms "Telephone Call" / "Data Transfer with Real-Time Properties" to include the express limitations of a telephone call as disclosed in the Specification (less than 0.5 seconds of time delay) as requirements of the terms. *See* A4191 at col. 2, ll. 18-25. Thus, a reference that fails to disclose a system that can communicate a telephone call, according to this express limitation, cannot anticipate.

Accordingly, the Court should overturn the BPAI's findings concerning Matsukawa and Jonas. Concerning Matsukawa, the BPAI acknowledged that Matsukawa does not specify a telephone call. A36. Indeed, Matsukawa bears no relation to telephony. The end terminals that connect to the ISDN terminal adapters of Matsukawa cannot be telephony peripheral devices because Matsukawa

does not disclose any type of data transfer that equates to telephony and Matsukawa also does not disclose a telephone as an end terminal, which confirms that telephony is certainly not contemplated. *See* A3909 at col. 1, ll. 9-14. The system disclosed in Matsukawa is incapable of sustaining a telephone call or providing real-time properties in keeping with the Specification of the '902 Patent, namely, FF3. A10.

Likewise, Jonas does not disclose a system that is capable of sustaining a telephone call as required by the '902 Patent. Indeed, the only disclosure of Jonas that relates to the capabilities of the system is that Jonas can process "interactive" data. A3452 at col. 4, ll. 17-20. A person having ordinary skill in the art would interpret "interactive" data to require an upward limitation of 2-3 seconds, far less limited than the 0.5 second required for IP telephony.

Should the Court adopt this construction of the terms "Telephone Call" / "Data Transfer with Real-Time Properties," then claims 100 and 102 would be confirmed as patentable. Should the Court adopt this construction of these terms as well as the proper construction of the term "Network," then the analysis would conclude with all appealed claims being confirmed as patentable.

3. The BPAI Failed to Properly Interpret the Terms "Control Signal" and "Communications Connection".

Upon *de novo* review, the Court should find legal error in the BPAI's failure to construe the terms "Control Signal" and "Communications Connection" and provide claim interpretations. SSBG asserts that the "Control Signal" should be construed to require the real-time changing-over of an ongoing telephone call from a packet-switched network to a line-switched network without interruption of end-to-end communications connection. *See, e.g.*, A4195 at col. 9, ll. 48-58. Without this construction, the terms "changing-over" and "without interruption" would be meaningless in the claims. SSBG asserts that the "Communications Connection" should be construed as an end-terminal-to-end-terminal link, *i.e.*, between established between two of the switches disclosed in the Specification. *Id.*; A4182 at Abstract. Otherwise, the term could be improperly read on any connection between an end terminal and an access point, a reading that would encompass scope separate from a telephone call. The BPAI's failure to construe the "Control Signal" was legal error because without a construction, the inventive concepts were essentially ignored.

All claims-at-issue require the terms "Control Signal," "Communications Connection," "changing-over," and "without interruption."[14] These terms address

[14] While claim 100 does not expressly require a "control signal," the control

key inventive concepts of the patent. Indeed, the terms also provide the solution to the problem present in prior art systems. *See* A7191-94. All of the appealed claims were carefully and deliberately limited to structure or acts of "changing-over" the routing of particular data during an end-to-end communications connection.[15] Likewise, all of the appealed claims were further limited to structure or acts for "changing-over" from the packet-switched network to the line-switched network "without interruption" of "the communications connection" / "the call set-up procedure." A4199-A4202.

i) The Farese, Yoshida, Matsukawa, and Jonas References Cannot Anticipate the Claims-at-Issue, under the Proper Claim Construction of the Terms.

The Court should correct the BPAI's legal error by providing a construction of the terms "Control Signal" and "Communications Connection" that requires the control signal to provide for an automatic change-over of the communications connection / call set-up procedure without interruption of an ongoing telephone

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device provides for the automatic change-over. And, while claims 68, 69, and 77 do not expressly require a "communications connection," these claims do expressly require a connection made between two end terminals. A4199-A4202.

[15] For example, in claims 68, 69, and 77, the "control signal [is] for changing-over from a packet-switching mode of transfer of the first data of the telephone call to a line-switching mode of transfer of the second data of the telephone call. . . ." A4199-A4200. Therefore, the call must be ongoing when the change-over occurs because the first data of the telephone call is already being transferred when the change-over occurs.

call / data transfer with real-time properties, where the communications connection is established between two end terminals. Under the proper construction, none of the prior art references can anticipate the appealed claims.

Farese does not disclose either limitation, as properly construed. Farese performs no such change-over. Rather, Farese teaches that certain types of data are routed over the ISDN D channel (the purported "packet-switched network" of Farese), while other types of data are routed over the ISDN B channel (the "line-switching network" of Farese). A3929 at col. 4, ll. 38-42; A3930-31 at col. 6, l. 68—col. 7, l. 4. One or the other is used for a certain data transfer, a change-over does not occur. In fact, Farese actually teaches away from the change-over required by the claims of the '902 Patent, instead teaching that a "telephone call" should be routed solely over the line-switching network. *See* A3932 at col. 9, ll. 58-60; col. 10, ll. 13-18. Thus, not only would Farese have no reason to change the ISDN access path during the telephone call, but also Farese teaches that a change-over of the "Communications Connection," as properly construed, should not occur. For this reason, Farese lacks any concept of a particular telephone call being changed-over during an existing transfer.

Likewise, Yoshida does not disclose either limitation, as properly construed. Yoshida does not disclose a structure adapted to permit the selective change-over of a telephone call. Indeed, Yoshida is essentially silent on the circumstances

when the apparatus is designed to switch a data connection from a packet mode to a line-switched connection. The only related disclosure in Yoshida states, "When the data packet from the LAN per unit time is increased, another virtual circuit is set up on B2 channel through the line switch. . . ." A3872 at Abstract; *see also* 3877 at col. 1, l. 66—col. 2, l. 5. Thus, the only reasonable interpretation is that Yoshida's ISDN access system monitors data traffic and generates a channel change signal if the traffic increases beyond a threshold. This is wholly different than the "Control Signal" of the '902 Patent: (1) Yoshida monitors the bulk data traffic as a whole, as opposed to a particular telephone call; (2) Yoshida's monitoring of an increase in traffic cannot effect a change-over "without interruption" of the communications connection between two end terminals, as required, which would instead monitor a decrease in traffic indicating that a potential interruption of the communications connection has occurred.

Additionally, Matsukawa does not disclose either limitation, as properly construed. The change-over of Matsukawa is not remotely close to that of the "902 Patent. As opposed to an automatic change-over that occurs "without interruption" of the communications connection, Matsukawa establishes a fixed amount of time, T1, that is measured before a change-over occurs. A3911 at col. 6, ll. 19-26. This is quite conceptually different. Even if Matsukawa were capable of acknowledging a delay requiring a change-over (which it is not), Matsukawa

would not immediately issue a control signal to effect a change-over, rather it will always wait the predetermined time T1 before effecting a change-over. *See id.* Therefore, Matsukawa's proposed solution, which could work in the context of anonymous bulk data transfers to an access point, is completely incapable of addressing the problems of IP telephony.

Finally, Jonas does not disclose either limitation, as properly construed. The purported "change-over" of Jonas has totally different properties than that of the '902 Patent. A3453 at col. 4, ll. 42-52; A3454 at col. 5, l. 53—col. 6, l. 3. The control signal of the '902 Patent effects a change-over of a particular communications connection from the Internet to the PSTN, whenever a data blockage occurs in the routing through the Internet – no matter the reason for the data blockage. For example, a data blockage could occur if someone "pulled the plug" of one of the switches to the Internet, if in one of the switches a buffer overrun occurred, or if in one of them no compression/decompression chip was available. Any of these would result in a change-over in the system of the '902 Patent. Conversely, the system of Jonas does not consider data blockages that occur outside the Internet, such that Jonas would not change-over the communications connections from the Internet to the PSTN if someone "pulled the plug" of an Internet switch.

Likewise, the system of Jonas does not monitor the data transfer of a particular communications connection, but rather monitors the "traffic" of the entire communications bus as a whole. Thus, Jonas performs a change-over of a communications connection from the Internet to the PSTN, even though that particular communications connection is free of any problem. Jonas just assumes it does have a problem, as it does not monitor the data transfer of that particular communications connection. Indeed, Jonas performs a change-over not only of the communications connection on the communications bus, but also of all future "certain applications" to the connection it has earlier established over the bypass network. A3454 at col. 5, ll. 56-60. This approach may have the disastrous consequence that the single bypass of Jonas gets overloaded, and, hence, the transmission delay would destroy its real-time property.[16] Therefore, the teachings of Jonas clearly contradict the teachings of the '902 Patent, where a change-over is performed only if a data blockage of the data transfer of a particular communications connection is detected. A4195 at col. 9, ll. 41-58.

[16] This is yet another example of why Jonas cannot disclose a system that is capable of sustaining a telephone call as required by the '902 Patent.

B. Even if the BPAI's Construction of the Claims is Upheld, the BPAI Erred in Affirming the Rejection of Claims 100 and 102 over Jonas.

In adopting the Examiner's rejections, the BPAI determined that claims 100 and 102 are anticipated only by Jonas under 35 U.S.C. § 102(e). A44. The Court should overturn the BPAI's decision as to claims 100 and 102 based on Jonas, as it is unsupported by substantial evidence. *See In re Gartside*, 203 F.3d 1305, 1316 (Fed. Cir. 2000).

Claim 100 requires the following:

> "data packet [] headers including information identifying respective origin and destination end terminals," that comprises a control device "for directing the IP data packets from the multiple origin end terminals to either the packet switching device or to the line switching device," where the control device is "responsive to the data packet headers for controlling the packet switching device and the line switching device for establishing and maintaining respective communications connections for data transfer with real-time properties between origin end terminals and destination end terminals," and is also "responsive to an overload in the Internet for automatically changing-over from packet-switching transfer of first data of a communications connection to line-switching transfer of second data of the communications connection without interruption of the communications connection when a data blockage occurs in the routing of data packets of the first data of the communications connection through the Internet."

A4201 at col. 22, ll. 23-51 (emphasis added).

The evidence of record is insufficient to support a finding that Jonas anticipates the claims of the '902 Patent for numerous reasons: (1) Jonas nowhere discloses an "end terminal;"[17] (2) Jonas nowhere discloses a "Communications Connection;"[18] (3) Jonas nowhere discloses "changing-over from packet-switching transfer of first data of a communications connection to line-switching transfer of second data of the communications connection;"[19] and (4) Jonas nowhere discloses that a "change-over" would occur "when a data blockage occurs in the routing of

[17] The "Hosts" of Jonas are not end terminals, but the system of Jonas always has end terminals, which are irrelevant for Jonas' invention. Accordingly, his data packet headers do not include information identifying respective origin and destination end terminals, *i.e.*, the data packet headers of Jonas identify just the source and destination routers and/or the type of service, which indicates the specific port of a router requested by the sending host.

[18] The "Communications Connection" required by the claims of the '902 Patent is an end terminal to end terminal connection, as discussed in Section VIII.A.3, *supra*. Certainly, as discussed *infra*, Jonas fails to disclose a "data transfer with real-time properties" between end terminals.

[19] The system of Jonas merely monitors the transmission delay between the routers 20 and 21. A3454 at col. 5, ll. 56-60. If this delay arises above a threshold value, the router 20 will establish a connection over the bypass network 30. This establishment is performed by the router 20, independently of whether it is currently involved in serving a "certain application." *Id.* at col. 5, ll. 53-56. Stated differently, Jonas here implicitly discloses that any future such application – indicating to the source router that it wishes to dynamically take the described advantage, *i.e.*, that the router should determine this application's routing dynamically – would be routed over the bypass network 30. *Id.* Jonas does not disclose that once the router has decided this application's routing, it would also dynamically change this determined routing as soon as it has established a connection over the bypass network 30.

data packets of the first data of the communications connection through the Internet." Despite and in addition to the aforementioned features that are lacking from the disclosure of Jonas, there can be no doubt that there is clearly insubstantial evidence of record for a finding that Jonas discloses (1) a "change-over" from a packet-switched network to a line-switched network without interruption of the communications connection and (2) a "telephone call" / "data transfer with real-time properties." The BPAI's findings as to at least these two features are unsupported by substantial evidence, and without either, Jonas does not anticipate.

1. The BPAI's Finding that Jonas Discloses "Changing-Over" from a Packet-Switched Network to a Line-Switched Network without Interruption of the Communications Connection was Erroneous.

Claim 100 requires a "change-over" from a packet-switched network to a line-switched network without interruption of the communications connection. The BPAI's finding that Jonas discloses such a "change-over" is unsupported by substantial evidence and should be overturned.

As discussed above in Section VIII.A.3, the purported "change-over" of Jonas has totally different properties that that of the '902 Patent. A3453 at col. 4, ll. 42-52; A3454 at col. 5, l. 53—col. 6, l. 3. Briefly stated, the system of Jonas does not consider data blockages that occur outside the Internet and does not

monitor the data transfer of a particular communications connection, as required by the '902 Patent. Indeed, there is no evidence of record that the purported "change-over" of Jonas is the same as the claim recitation that requires the "changing-over from packet-switching transfer of first data of a communications connection to line-switching transfer of second data of the communications connection without interruption of the communications connection." *See id.*; A4201 at claim 100. Furthermore, there is no evidence that Jonas inherently discloses the aforementioned claim limitation.

The express teachings of Jonas demonstrate that the Board's finding is unsupported by substantial evidence. The Board's finding as to FF9 is clearly outside of the scope of claim 100, which requires a change-over **during** data transmission. *See* A27-A29; A11-A12. By "designating that a packet is to be sent over the bypass network," the choice of network is predetermined prior to the transmission of any data. A3453 at col. 4, ll. 42-52. This approach cannot occur during a communications connection "without interruption."

Likewise, the Board's finding as to FF11 does not disclose the limitations of claim 100. *See* A28-A29; A13. This approach as taught by Jonas does not disclose a change-over during the communications connection "without interruption." There is no evidence of record and no disclosure in Jonas as to when this purported "change-over" occurs. Indeed, the only timing discussion of Jonas

relates to pre-designated packets, which would necessarily be designated prior to the transmission of any of the packets of a given communication. A3453 at col. 4, ll. 42-52. The only disclosure of Jonas related to dynamically establishing a bypass connection states that the source router will establish a connection over the bypass network if a delay is detected. A13 at FF11; A3454 at col. 5, l. 53—col. 6, l. 3. This merely implies that when a certain delay is detected, a new connection will be made over the bypass network through which all new communications will be routed, not that there will be an automatic change-over, as required by claim 100.

The only evidence regarding the term "dynamic" as used in Jonas does not support the BPAI's decision. Jonas is clear that the term "dynamic" does not refer to mid-call change-overs, but rather refers to a change-over that is effected without an external indication from the packet headers. *See* A3453 at col. 5, ll. 56-58. This is in contrast to the pre-designated change-over where control information for the routing of the data packets through the packet-switched network is contained in the packet headers. A3453 at col. 4, ll. 42-52. For a dynamic change-over, the router itself establishes a bypass connection based on circumstantial information, such as topological delay time and/or the number of gateways through which a network path traverses and/or ping-roundtrip messages. A3454 at col. 5, l. 57—col. 6, l. 3.

Finally, claim 100 requires that the control device is responsive to not only the data packet headers, but also to an overload on the Internet. Jonas cannot anticipate claim 100 because Jonas does not disclose that the control device is responsive to both the data packet headers and to an overload in the Internet. The change-over of Jonas is caused by either an indication in the data packet headers or a detection of the delay of the packet-switched network – not both. Indeed, Jonas repeatedly discloses (*see, e.g.*, A3453 at col. 4, ll. 14-20; col. 4, ll. 37-54) that the only control signal is made available exclusively by applications in the host computer while, separately, the router can autonomously determine to route over the bypass network based on circumstantial information, such as topological delay time, etc. (A3454 at col. 5, ll. 60-65). Not only does this show that Jonas does not anticipate, but also it shows that Jonas actually teaches away from the teachings of the '902 Patent. The teachings of Jonas explicitly exclude an inventive contribution of the '902 invention, which is to achieve a substantial real-time data transfer during an Internet telephone call from an Internet connection to an ISDN/PSTN connection, only if the substantial real-time property of the Internet connection of a particular communications connection is affected. There is no evidence to support a finding that Jonas effects a change-over on the basis of a particular communications connection. Instead, the evidence and the teachings of Jonas support a finding that Jonas effects a system-wide change-over to the bypass

network when a delay is sensed for all data packet transfers. A11-A13; A3454 at col. 5, ll. 53-60.

2. The BPAI's Finding that Jonas Discloses a Structure Capable of Sustaining a "Data Transfer with Real-Time Properties" was Erroneous.

Claim 100 requires the transfer of data with real-time properties. A4201 at claim 100. The BPAI's finding that Jonas discloses such a "data transfer with real-time properties" is unsupported by substantial evidence and should be overturned.

The BPAI determined that Jonas teaches an apparatus that is capable of sustaining a telephone call or providing real-time properties. A27; *see* A11 at FF8. This is incorrect. As discussed above,[20] the BPAI stated that "if a cited reference details a structure capable of sustaining a telephone call or providing real-time properties in keeping with the Specification [of the '902 Patent] (FF3), then that cited reference meets the requirements of the claims for 'a telephone call' and/or 'real-time properties.'" A21-22. While SSGB does not disagree with this statement, the BPAI's finding that Jonas is so capable is unsubstantiated, as no evidence of record supports this finding.

The BPAI's decision is based on Jonas's disclosure of transmitting data traffic "with minimal delay time." A27, *see* A11 at FF8. This single statement of

[20] Section VIII.A.2, *supra*.

Jonas fails to detail a structure capable of sustaining a telephone call or providing real-time properties in keeping with the Specification of the '902 Patent, namely, FF3. *See* A21-22; A9.

Jonas does not teach a device capable of sustaining a telephone call. Jonas is aimed at the transfer of "secret and/or critical data traffic" between "computer users." *See* A11 at FF8. Jonas also does not disclose that these transfers "with minimal delay time[s]" are within the upward time limitations on the acceptable bandwidth and time delay required by the '902 Patent, namely, less than 8 kbit/s bandwidth and 0.5 seconds of time delay, respectively. Jonas does not disclose a system that is capable of processing data with these requirements. As mentioned, the only disclosure of Jonas that relates to the capabilities of the system is that Jonas can process "interactive" data (A3453 at col. 4, ll. 17-20), which a person having ordinary skill in the art would interpret to only require an upward limitation of 2-3 seconds, far less limited than the 0.5 second required for IP telephony (A4191 at col. 2, ll. 18-25). Accordingly, the BPAI's determination that Jonas is capable of sustaining a "data transfer with real-time properties" is unsupported by substantial evidence and should be overturned.

C. The BPAI Correctly Confirmed the Validity of Claims 91 and 104.

Cisco proffered two rejections for claims 91 and 104. The first proffered rejection stated that claims 91 and 104 are anticipated by Focsaneanu. A25. The second proffered rejection for claim 91 was based on the combination of Focsaneanu, Lucent and one of Jonas, Arango and Yoshida and for claim 104 was based on the combination of Focsaneanu, Jonas, and Lucent. A43. For the reasons set forth below, the BPAI's decision not to adopt the proffered grounds of rejection was correct and supported by substantial evidence.

1. Claims 91 and 104 are Patentable over Focsaneanu.

i) Focsaneanu Fails to Disclose a Change-Over without Interruption of the Communications Connection.

Claims 91 and 104 depend from claim claims 84 and 100, respectively. These two dependent claims are patentable over Focsaneanu for the same reasons claims 84 and 100 are patentable over Focsaneanu. For example, the BPAI properly concluded that Focsaneanu does not disclose that change-over can occur during an active communication without interruption thereof. A25. As set forth below, both claim 91 and claim 104 contain limitations requiring the change-over "without interruption" of the communications connection.

> the control device also being responsive to a control signal for changing-over from packet-switching transfer of first data of a communications connection to line-switching transfer of second data of the communications

> connection without interruption of the communications connection.

A4201 at claim 91.

> the control device also being responsive to an overload in the Internet for automatically changing-over from packet-switching transfer of first data of a communications connection to line-switching transfer of second data of the communication connection without interruption of the communications connection when a data blockage occurs in the routing of data packets in the routing of data packets of the first data of the communications connection through the Internet.

A4202 at claim 104.

Cisco admits that Focsaneanu discloses that "a data service request initiated by a user during a POTS call will disconnect the phone….thus terminating one call and replacing it with another." Cisco Brief at 39. A communications connection (e.g., a telephone call) cannot continue "without interruption" (as required by the claims) if the call is terminated.

Cisco argues that the BPAI ignored a disclosure of Focsaneanu found at col. 11, lines 7-16. In the relevant passage, Focsaneanu discloses that "[t]he voice sercie QOS is maintained by continuous monitoring of the transmission delay." A3441 at col. 11, ll. 14-15. However, the BPAI clearly considered this disclosure of Focsaneanu and found that "the monitoring of the QoS may allow for the most appropriate channel to be selected when the call is eventually made." A25. The BPAI found no evidence that Focsaneanu disclosed a change-over without

interruption. *See id.* Cisco offers no evidence to the contrary, merely a statement that "no other reading of this disclosure makes sense." *Id.* (citing TRP Rebut. Br. 10).

Tellingly, Cisco's brief contains the following uncited and unsupported statement:

> This change between the network originally selected for the voice call and the different network on which the call is routed is dynamically carried out within a single call and does not require the user to initiate a new call set-up procedure or to re-dial the number.

Cisco Brief at 40. Nowhere does Focsaneanu disclose that the change is "carried out within a single call" as argued by Cisco. Instead, as the BPAI decided, the "monitoring of QoS may allow for the most appropriate channel to be selected when the call is eventually made." A25 (citing Ex. Ans. at 148). In fact, numerous disclosures throughout Focsaneanu support the BPAI's position.

For example, Focsaneanu discloses the use of abbreviated dialing to enable the user to select whether a particular call will be routed over a line-switching network (voice call) or a packet-switching network (data call). A request for a data connection is indicated by dialing a "1" and a voice connection by dialing a "0" at the beginning of the call. A3442 at col. 13, ll. 15-40. In addition, Focsaneanu discloses that the "appropriate routing" (e.g., line switching network or packet switching network) is determined "prior" to any communications connection or

"prior to interfacing CPEs and the communications networks." A3437 at col. 4, ll. 40-57.

Cisco argues that the reference in Focsaneanu to "real time" logical assignments of voice data refers to transferring calls during an ongoing connection. Cisco Brief at 41. However, once again, Cisco overstates the disclosure of Focsaneanu, which simply discloses that "the invention provides for logical assignments in real time at the access module or services provider for alternate routing amount available transport networks, e.g. voice can be routed over data networks and vice versa." A3442 at col. 14:13-16. While the assignment of the network is made in "real time", there is no disclosure of a change over occurring in "real time" (*i.e.*, during a telephone call).

Thus, the BPAI's factual determination that Focsaneanu does not anticipate claims 91 and 104 was correct and supported by substantial evidence.

ii) Focsaneanu Fails to Disclose the Claimed Multiplexer Device.

In addition to failing to disclosure a changing-over without interruption of the communications connection, Focsaneanu also fails to disclose "a multiplexer device for multiplexing data of several origin end terminals over a single line connection through the line-switching network." *See* A4201 at claim 91; A4202 at claim 104.

Cisco contends that the BPAI incorrectly read limitations into claims 91 and 104 that are not present in the claims. The BPAI, however, simply found that claims 91 and 104 require more than just a "multiplexer." These two claims depend from claims 84 and 100 and, thus, require a multiplexer that functions in the context of the other claim elements recited in the independent claims from which these two claims depend. Thus, for the reasons set forth above, the BPAI correctly found that: "The multiplexing disclosed in Focsaneanu is not disclose to support changing-over between switching networks for data transfers having real-time properties." A43.

In addition, the multiplexer disclosed in Focsaneanu is not used for "multiplexing data of several origin end terminals over a single line connection" as called for in the confirmed claims. A4201 at claim 91; A4202 at claim 104. As the BPAI properly notes in its Finding of Fact No. 6, the limited disclosure in Focsaneanu related to multiplexing simply states that signals from line interfaces may be multiplexed through a multiplexer (258) as part of the operation of the access module. A11. Focsaneanu discloses that each line interface may correspond to a different CPE connection. A3439 at col. 7, l. 51—col. 8, l. 2. The signals from the different CPEs require different service based on the service requested. *Id.* at col. 8, l. 17. There is no disclosure in Focsaneanu of multiplexing data over "a single line connection."

Thus, the failure of Focsaneanu to disclose the claimed "multiplexing device" provides a separate evidentiary basis of support for the BPAI's factual determination that Focsaneanu does not anticipate claims 91 and 104.

2. Claims 91 and 104 are Patentable over Focsaneanu in Combination with Other Prior Art References.

With regard to the proposed obviousness rejections of claims 91 and 104, there is no evidence in the record that the use of the multiplexer disclosed in the system of Focsaneanu in another alleged system that supported changing over during a telephone call would have been obvious. Cisco has offered no such evidence. In support of its decision not to adopt Cisco's position, the BPAI relies on the fact that the multiplexer disclosed in Focsaneanu is used in a system which does not include the claimed change over. A42. There is no evidence to the contrary.

The BPAI did not decide whether claims 84 and 100 were rendered obvious under 35 U.S.C. § 103(a). The BPAI found "it unnecessary to reach the propriety of the Examiner's decision to adopt Requestor's remaining proposed rejections, save for claims where rejections have not been adopted." A9, n.8 (citing *In re Gleave*, 560 F.3d 1331, 1338 (Fed. Cir. 2009)). Similarly, with regard to claims 91 and 104, which depend from claims 84 and 100, respectively, the BPAI only addressed whether Focsaneanu disclosed the claimed multiplexer. A42-A43. The

BPAI did not address whether it would have been obvious to combine references to arrive at the claimed invention. To the extent that the BPAI did not make underlying factual findings related to the consideration of the proffered obviousness rejections of claims 91 and 104, this Court should not "simply [make] factual findings on its own." *Hensley v. West*, 212 F.3d 1255. 1263 (Fed. Cir. 2000). The BPAI explained that: "while the Requestor may be correct that including a multiplexer in the system of the combination of Focsaneanu, Lucent and one of Jonas, Arango, and Yoshida could be obvious, the use of such a multiplexer is not necessarily obvious in the contexts of claims 91 and 104." A43-A44. The BPAI correctly noted that Cisco's proffered rejections rely solely on Focsaneanu to teach the claimed "multiplexer device." A43. The BPAI correctly found that "the multiplexing disclosed in Focsaneanu is not disclosed to support changing over between switching networks for data transfers having real time properties." *Id.* Furthermore, as explained above, the record shows that Focsaneanu does not disclose the claimed multiplexer.

In addition, the BPAI's decision not to adopt an obviousness rejection of claims 91 and 104 should be upheld because Cisco's request for *inter partes* reexamination of claims 91 and 104 was defective for failing to identify the differences between the claims and the prior art. *See, e.g.*, A7455. One of the underlying four factual questions of the obviousness determination is the

differences between the subject matter claimed and the prior art. *Graham v. John Deere Co.* 383 U.S. 1, 17, 148 U.S.P.Q. 459, 467 (1966). The Examiner properly found that Cisco failed to identify any differences between the subject matter of claim 91 and 104 and Focsaneanu. A7455. Thus, the proffered rejections based on obviousness were properly not adopted by the Examiner. A7639; A7642; A7646. It is not proper for Cisco to ask the BPAI and this Court to "fix" its mistake in its request for reexamination. When offering a rejection based on anticipation or, in the alternative, obviousness a party is not relieved of its obligation to identify the basis for its assertion. *LeVeen v. Edwards*, 57 USPQ2d 1406, 1414 (Bd. Pat. App. & Int. 2000). Thus, the BPAI's decision not to adopt Cisco's proffered obviousness rejection was correct and supported by substantial evidence.

IX. CONCLUSION AND STATEMENT OF RELIEF REQUESTED

The Court should find claims 68, 69, 71, 75, 77, 79, 82, 84, 87, 90, 92, 95, and 98 patentable over Farese, Yoshida, Matsukawa, and Jonas. Additionally, the Court should find that the BPAI's decision that claims 100 and 102 are anticipated by Jonas is not supported by "substantial evidence"; claims 100 and 102 are valid. Finally, the Court should affirm the validity of claims 91 and 104.

Respectfully Submitted,

February 6, 2013

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CERTIFICATE OF COMPLIANCE

I certify that the foregoing **BRIEF FOR CROSS-APPELLANT TELES AG INFORMATIONSTECHNOLOGIEN** complies with the type-volume limitation of Federal Rule of Appellate Procedure 28.1(e). The brief contains 14,640 words, excluding the parts of the brief exempted by Federal Circuit Rule 32(b) and Federal Rule of Appellate Procedure 32(a)(7)(B)(iii), as measured by the word processing software used to prepare this brief.

I further certify that the foregoing **BRIEF FOR CROSS-APPELLANT TELES AG INFORMATIONSTECHNOLOGIEN** complies with the typeface requirements of Federal Rule of Appellate Procedure 32(a)(5) and the type style requirements of Federal Rule of Appellate Procedure 32(a)(6). The brief has been prepared in a proportionally spaced typeface using Microsoft Word 2003 in 14 point Times New Roman font.

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CERTIFICATE OF SERVICE

I certify that on this 6th day of February, 2013, in accordance with Fed. R. App. Pro. 25(c)(1)(D) and Federal Circuit Rule 25(a), the foregoing **BRIEF FOR CROSS-APPELLANT TELES AG INFORMATIONSTECHNOLOGIEN** is being served electronically on counsel for appellant and appellee via the court's CM/ECF system.

Upon acceptance by the Court of the e-filed document, six paper copies will be filed with the Court, via Federal Express, within the time provided in the Court's rules. Paper copies will also be mailed to counsel for appellant and appellee at the time paper copies are sent to the Court.

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