

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

UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

CISCO SYSTEMS, INC.,
Appellant,

v.

TERESA STANEK REA, ACTING 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.

REPLY BRIEF FOR CROSS-APPELLANT TELES AG
INFORMATIONSTECHNOLOGIEN

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JULY 29, 2013

UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

CISCO SYSTEMS, INC. V. REA

CASE NO. 2012-1513, -1514

CERTIFICATE OF INTEREST

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

1. The full name of every party or amicus represented by me is
Sigram Schindler Beteiligungsgesellschaft mbH.
2. The name of the real party in interest
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:
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I. INTRODUCTION / SUMMARY

This Reply Brief of the Sigram Schindler Beteiligungsgesellschaft mbH (“SSBG”) responds to the arguments of the Acting Director of the United States Patent and Trademark Office (“Acting Director” or “USPTO”) and of Cisco Systems, Inc. (“CISCO”), which they presented in their briefs of May 2, 2013, resp. June 28, 2013. These arguments cause this response to totally focus on the legal errors the Board of Patent Appeals and Interferences (“BPAI”) committed in its decision, and both CISCO’s and USPTO’s briefs basically echo, in their

(1) interpretation of 4 key terms of the '902 patent – by disregarding of this

Court’s *Markman* and *Phillips* decisions as to claim construction, in particular as being refined by the Supreme Court’s groundbreaking *Mayo* decision for emerging technology inventions, such as the ‘902 invention¹⁾ – and in its

(2) finding that substantial evidence supports that Jonas, Farese, Yoshida, and/or Matsukawa anticipate many of the '902 patent’s claims 68-102, *see* III.

(1) maintains that both parties’ claim constructions for the claimed ‘902 invention not only contradict this Court’s long time established pertinent precedents, but that they also ignore the fundamental impact of the Supreme Court’s *Mayo* decision on the claim construction for a model based claimed invention – requiring that, in such cases, the claim construction be based on the claimed invention’s “inventive concepts”.²⁾ (2) then follows straightforward from (1).

¹ More precisely, the ‘902 invention is “model based”, as its subject matter is a vastly intangible telecommunications software system. See: "The US Highest Courts’ Patent Precedents in *Mayo/Myriad/CLS/Ultramercial/LBC*: ...”, on www.FSTP-Expert-System.com.

II. ARGUMENT

Both parties' tests of the claimed '902 invention under 35 U.S.C. § 102 are legally incorrect based on faulty claim constructions under §§ 112/101.

“Classical” claim construction is subject to limitations this Court’s precedents have clearly defined, in particular by its *Markman* and *Phillips* decisions. By the Supreme Court’s *Mayo* decision, for a model based claimed invention, the claim construction must additionally first identify its “inventive concepts” describing the inventivity¹¹⁾ of this claimed invention, on which *Mayo*’s tests are to be based, here under §§ 101(new & useful) and 102(novel). The decisive features of this “post-*Mayo*” or “refined” claim construction for a model based invention are its increased • purposefulness¹²⁾ (by interpreting this invention’s terms as focused on its inventivity,¹¹⁾ i.e., on its novel features, as required by *Phillips* already) and • completeness (by assessing the coherence of its §§ 102/103 tests to its §§ 112/101 tests),⁵⁾ i.e., are its increased focus/preciseness¹²⁾ and coherence.

These features of the refined/post-*Mayo* claim construction²⁾ exclude also the misuse of the USPTO’s broadest reasonable interpretation (“BRI”) guideline (for defining the BRI of a claim of a model based claimed invention) by using it for

²⁾ which not only enable, for any model based claimed invention, clearly^{11),12)} separating its patent-eligible from its noneligible inventive concepts for its tests under §§ 101/102/103, being *Mayo*’s primary issue.

volitional broadenings of the meanings of this claimed invention's terms – by disregarding the pre-*Mayo* precedents, in particular the *Markman/Phillips* legal directives. They clearly limit these meanings to what the functioning of this claimed invention **indispensably needs**¹⁰. They thus exclude **broadening** these meanings such that their use by the claimed invention would **render it useless**³. Exactly this misuse (i.e., the disregarding of *Markman/Phillips* by such inadmissible broadenings of the meanings of these 4 key '902 terms) is practiced again and again by the USPTO's and CISCO's briefs, just as originally done by the BPAI's decision, as shown in the below sections 1-4 by multiple examples³.

In other words, using the above Highest Courts' precedents, the below 4 subsections show that the BPAI's decision and the USPTO's and CISCO's briefs, because of such misuse of the BRI guideline, indeed practice "freestyle" claim constructions for the claimed '902 invention – clearly enjoined by *Markman/Phillips*. Moreover, both parties completely ignore the *Mayo* directives as to refining the classical claim construction; it would indeed have exposed this misuse.

Hence, both parties' interpretations of the 4 key '902 terms are legally obsolete, just as their arguments based on these interpretations, alleging the anticipation of the claimed '902 invention by Jonas, Farese, Yoshida, and/or Matsukawa.

³ – and hence bar it from passing the § 101(usefulness) test, first of all, which to check in their arguments BPAI/USPTO/CISCO carefully avoided.

A. The Interpretations of the 4 ‘902 Terms by USPTO / CISCO are False.

As indicated above, this brief will first clarify a serious trap with classical claim construction under 35 U.S.C. §§ 101/112 for model based claimed inventions, here for the ‘902 invention¹⁾, that BPAI/USPTO/CISCO attempted to use. Yet in vain, as this clarification renders their efforts obsolete.

This threat arises as model based claimed inventions always deal with subject matter that is partly intangible, invisible, and potentially also non-patent-eligible. As a consequence of the partly non-materiality/non-visualizability of such an invention – logically, it hence is necessarily vastly mental only, then based on a mental “model” its inventor had in his/her mind when creating and specifying it. E.g., the “OSI model” of telecommunication technology, the “molecular bonding forces” model of nano-technology, the “human genome DNA” model of genetics technology, the “Natural Language” model of IT, just as less technical ones, e.g. the “constitution” model of sociology, the “BRI model” of patent examination, etc. – the philosophical generic term for such models being “paradigm”; just technically, models/paradigms are “reference systems”, such as “coordinate systems”.

As any such model additionally is “undecidable”, it is vulnerable by volitional interpretations, especially due to their initial volitional mind settings⁴⁾. These are capable of driving any such model into contradiction to itself, in particular if the model is used for interpreting another issue of model based subject matter.

In the ‘902 case¹⁾, a volitional interpretation of the BRI model is used for interpreting the model based issue “testing the claimed ‘902 invention under § 102”.⁴⁾

⁴ **For enabling** this volitional interpretation of the BRI model, the tricky initial mind setting is indispensable, which originally the BPAI’s decision practiced and the briefs of USPTO and CISCO echoed. It works as follows: While

- claim 68 starts with limiting its scope to a **i) telephone call** (confirmed by SSBG’s Principal Brief in **(a)**, p.14), then focuses on the **ii) control signal** and **iii) changing-over** therein (confirmed by CISCO’s brief by its massive highlighting of this section of claim 68, p.8, and by SSBG’s Principal Brief, putting these completely separate limitations already next in **(b)** and **(c)**, p.14-15), and finally puts **iv) networks** last (in **(d)**, p. 15, thus indicating that they are subordinate as technically almost implied by limitations **i)-iii)**),
- BPAI/USPTO/CISCO reverse this sequence of stating scope limitations for claim 68 and replace its true initial mind setting “telephony” by “data communications” for pretending an alleged breadth of its meanings,
 - first of the term “packet-/line-witching network” (p. 18-19/29-34/24-29),
 - next of the term “telephone call” (p. 20-21/35-37/29-35),
 - finally also of the totally independent terms “control signal” and “changing-over”, lumping them together, just as if they together would establish only a single and very vague limitation (p. 21-22/37-38/35-41).

With a model based claimed invention, this reversal of stating its limitations may easily disguise inadmissibly removing some of them¹¹⁾. E.g., in this ‘902 case, the start by a network discussion induces that then a telephone call needs only a network connection, not a communications connection, as erroneously indeed insinuated by BPAI/USPTO/CISCO. This tricky “red herring” in claim construction for a model based claimed invention – managing the sequence of claim limitations – is not addressed by the *Markman/Phillips* decisions.

Here their arguing is additionally untenable due to the many technical misrepresentations of SSBG’s statements in its earlier briefs (see below). They even present this ‘902 invention, today called VoIP telephony, as an incredible stupid “usual data transfer driven” alleged invention, which in fact is anticipated by dozens of prior art publications (and the ‘902 inventor hence never would have dared to consider as patentable) – although on the basis of the identical ‘902 specification the USPTO recently granted 3 more patents. Ignoring all that, this brief focuses on this “illegal arguing loophole” left open by the *Markman/Phillips* decisions – tried out by BPAI/USPTO/CISCO – that requires and is shut by the Supreme Court’s *Mayo* decision.

Concretely applying these considerations⁴⁾ must start from the following. At issue are the 4 key terms⁴⁾ of the representative claim 68 (USPTO brief at p. 8) of the model based claimed '902 invention: "telephone call", "control signal", "changing-over", "packet-/line-switching network".⁴⁾ The SSBG Principal Brief provided (at pp. 14-15, 16-20) the definitions of their meanings⁶⁾ such that they meet the §§ 112/101 requirements stated by the *Markman* and *Phillips* decisions – in detail elaborated-on in its Section VIII at pp. 28-64 – and that they represent the peering⁶⁾ 4 of the '902 “inventive concepts”. At page 13, the Brief clarified that this is exactly the way of defining the meanings of terms specifying a model based invention as clearly as asked for by the Supreme Court's *Mayo* decision. Section VI (at pp. 24-26) also clarified how the *Mayo* decision's inventive concepts increase the preciseness of the *Phillips* decision by substantially refining by them its fundamental notion of ". . . an objective baseline from which to begin claim interpretation". SSBG Principal Brief at p. 25.

By contrast, BPAI/USPTO/CISCO misuse the BRI guideline (and hence the *Markman/Phillips* decisions underlying it) and completely refuse proceeding as required by the *Mayo* decision for a model based claimed invention: To expose what embodies the "inventivity of the claimed invention"¹¹⁾ by the definitions of the meanings of its terms⁶⁾ – being its "inventive concepts", achieving the refined '902 claim construction under §§ 112/101 of increased purposefulness¹²⁾ and completeness as to testing the '902 invention (and its claim 68) under §§ 101/102.

Seen in the light of the Supreme Court's *Mayo* decision, both parties provide definitions of the meanings of these 4 key '902 terms, which neither represent the inventivity¹¹⁾ embodied by the claimed '902 invention nor enable coherently testing it⁵⁾ under §§ 101/102. Both parties hence deny analyzing the claimed '902 invention in the light of the *Mayo* decision – for sake of establishing increased focus/clarity/preciseness/coherence.⁴⁾

This comment on the legalistic deficiencies of the briefs of the USPTO and CISCO is reflected by the structure of the subsequent presentations showing their legal faultiness in detail. These presentations focus, in the below sections 1-4, on both parties' classical claim interpretations for the claimed '902 invention completely ignoring the Supreme Court's *Mayo* directives as to refining the claim construction for a model based claimed invention. Section 5 then addresses that they thereby violate already this Court's long-time-established *Markman/Phillips* decisions – which in turn are explicitly mirrored by the USPTO's BRI guideline, on which the briefs are based, yet grossly misusing it in the way explained above⁴⁾ – and that they also err in believing, SSBG had waived any arguments.

If there were no word count limitation, section 5 would have been split such that the analysis of the parties' incorrect arguments were presented in a post- and a pre-*Mayo* track of identical structure. The below sections 1-4 – showing the par-

⁵ “INVENTIVE CONCEPTS ENABLED . . .”, www.FSTP-Expert-System.com.

ties' errors in attacking SSBG's presentations in its Principal Brief of the meanings of the 4 key '902 terms according to the refined/post-*Mayo* claim construction – then were mirrored by sections 5-8 leading to exactly the same result, yet by applying only the classical/pre-*Mayo* claim construction. The simplicity of the first presentation (sections 1-4) – if compared to the much more intricate second one, skipped here – shows that the Supreme Court has taken, by its *KSR/Bilski/Mayo* decisions, US patent precedents to a level of development enabling^{6),11),12)} the easy and dependable analysis of model based claimed inventions, i.e., enabling predictable and consistent patent precedents also for such inventions.

Thereafter, sections B. and C. may accordingly reaffirm the original statements in the SSBG's Principal Brief, that and why none of the prior art documents at issue anticipated the claimed '902 invention.

Before entering into the below 5 sections without turning away from these fundamental questions of claim construction – arising with the growing need to grant patents to emerging technology and, hence, model based inventions, with increasing plainly mental shares of inventivity^{6),11)} and usefulness¹²⁾, i.e., becoming increasingly fictional – a remark is in place about the USPTO's and CISCO's complaints about the Principal Brief of SSBG being so unusual.

First of all, both are right, and SSBG offers its apologies. Though, a few explanatory words may be permitted and even helpful.

Namely, at least to the same degree unusual is the perfection of misuse of the BRI guideline/model by BPAI/USPTO/CISCO⁴⁾ – i.e. of the *Markman/Phillips* decisions on which it is built – in the interpretation of a model based claimed invention, here the ‘902 invention. Though, such misuse of the BRI claim construction guideline was not quite new. A similar misuse of the *Markman/ Phillips* interpretation of 35 U.S.C. §§ 101/112 has become apparent e.g. in the *Mayo* and *Myriad* cases – also¹⁾ dealing with emerging technology based inventions, though of much higher profiles. The *Mayo* and the *Myriad* decisions represent the Supreme Court’s utmost constructive intervention as to terminating the confusion with emerging technology inventions – often felt unavoidable – by its direction-pointing guidance on claim construction for them. With a closer look, it turns out that even its *KSR/Bilski* decisions were already suffering from this problem of alleged interpretation loopholes in *Markman/Phillips* as to §§ 101/112 claim construction⁴⁾, especially for model based inventions. They might have ended otherwise, if their claims were already drafted meeting the *Mayo* decision’s directives.

Advanced IT recognized early-on¹⁾ this rationale in the Supreme Court’s *KSR/Bilski/Mayo* line of decisions. But, assessing its legal applicability over several cases was hard – as this Court knows – just as stabilizing in an advanced IT sense¹⁾, i.e., with scientific rigor, the Highest Courts’ total rationale. Both were achieved only stepwise, as occasionally mirrored in SSBG’s wordings – regrettably. SSBG’s early reliance on the *Mayo* decision in its Principal Brief is legally correct.

1. Both Parties Err in their Interpretations of the Term “Telephone Call”, Due to Ignoring the *Mayo* Decision’s Advice/Directives.

This section comprises several explanations not repeated in the coming 3 sections.

The term “telephone call” identifies a notion⁶⁾ – more precisely: an inventive concept⁶⁾ – supposedly disclosed by the ‘902 specification. This disclosure must meet the requirements stated by § 101/112, hence comprise that this notion meets especially the “usefulness” requirement of § 101 – unless this is known by the person of pertinent ordinary skill and creativity.

Of the total inventivity¹¹⁾ embodied by the claimed ‘902 invention, the particular part embodied by this term’s meaning, i.e., by its peer inventive concept – which the Mayo decision requests to be identified in the claim construction for it (and for its claim, here claim 68) – is described by the clause **(a’)** on p. 16-17 of SSBG’s Principal Brief. Specifying this particular part¹¹⁾ of the claimed ‘902 invention’s total inventivity logically and indispensably requires a reference term –

⁶⁾ A term together with its meaning is denoted as “notion”. A notion hence is a definition of its term’s meaning. A notion is called an “inventive concept”, if its meaning has the pragmatics, i.e., serves the purpose defined by the Supreme Court – just as by advanced IT – to identify one or several of the properties’ limitations of some broader set of such properties’ limitations¹¹⁾, which specifies a whatsoever “§ 101(useful)” entity/endeavor/.../invention¹²⁾. The notions of concern here are 4 inventive concepts with terms being the 4 key ‘902 terms, and meanings provided by the ‘902 specification’s limitations. The 4 inventive concepts thus represent 4 parts of the total ‘902 inventivity¹¹⁾ (= usefulness¹²⁾). I.e., the term “telephone call” is peer to the inventive concept “telephone call”, and its meaning is defined by the notion “communications connection”⁹⁾, excluding that a telephone call (comprising its call set-up) functions without its end terminals – as explained in **(a)** in SSBG’s Principal Brief based on its patent.

e.g., the term “communications connection” – identifying a meaning known by the person of ordinary telecommunications skill and creativity. This reference term is also disclosed by the ‘902 specification (Principal Brief at p. 14), whereby clause (a) recapitulates several of its properties, as just skill known by this person.

While these descriptions in (a) and (a’) of SSBG’s Principal Brief provide the specific limitations¹¹⁾/information¹²⁾ asked for by the *Mayo* decision,^{7),8)} neither parties’ classical claim constructions provides such purposeful¹²⁾ information – for the ‘902 term “telephone call”⁹⁾ the **broadest indispensable**¹⁰⁾ meaning provided

⁷ For the definition of “inventive concept” as needs for developing “patent technology” capable of exactly modeling Highest Courts’ patent precedents, see^{1),2)}.

⁸ – as it would be asked for also by advanced IT for defining a notion representing part of a claimed invention’s inventivity^{1),2)} –

⁹ The ‘902 specification discloses that the control signal is generated as the consequence of monitoring the communications connection of a telephone call and this monitoring causes detecting in this communications connection some given threshold being exceeded somewhere therein, without imposing any limitations on where the monitoring therein may be performed resp. the threshold exceeded. I.e., the claimed ‘902 invention comprises any such monitoring and detecting process therein known by the person of ordinary skill and creativity, especially monitoring resources (to be) used by the communications connection of the telephone call outside of the packet switching network it uses. Thus, the ‘902 notion of “telephone call” resp. its ‘902 inventive concept resp. the ‘902 meaning associated with this term represents – up to the *Mayo* decision, and absolutely *Phillips* decision conform – more limitations than the 3 parties recognized for their classical claim construction, hence flawed.

¹⁰ Mathematically speaking, this is a typical “max/min” definition e.g. from Optimization Theory, here: It is the term’s maximal meaning of the set of all minimal meanings sufficient for enabling the functioning of the claimed invention described by its specification. I.e., there are other intricacies lingering with the *Markman/Phillips* based BRI guideline, here not elaborated on, but already solved in: “AN INNOVATION”, www.FSTP-Expert-System.com.

by the '902 specification. This communications connection based notion of a telephone call⁶⁾ is quite crucial for the '902 inventive concept “control signal”, too.

Instead, both parties construe meanings of this '902 term “telephone call” out of the blue. Their “freestyle meanings” represent in no way that part of the claimed '902 invention's total inventivity¹¹⁾ or usefulness¹²⁾, which is embodied by specifically the term “telephone call” (resp. its peer inventive concept) provided by the '902 specification. In other words, neither of both parties only tries to recognize in its '902 claim construction these absolutely crucial⁹⁾ limitations of the claimed '902 invention represented by the term “telephone call”. Their both freestyle meanings of this term are legally too broad⁴⁾ – according to *Phillips/pre-Mayo*, already (and post-*Mayo* anyway¹²⁾).

Hence, both parties refuse performing the '902 claim construction as required by the Supreme Court's *Mayo* decision, implying that their claim constructions for the claimed '902 invention are legally faulty. And: Both parties' classical claim constructions are also legally flawed as failing to proceed therein as required by *Markman/Phillips*^{11),12)} – as limited by the *Mayo* decision's advice for claim constructions for emerging technology based claimed inventions, e.g., the '902 one.

¹¹⁾ The “inventivity” of a claimed invention – i.e., embodied by it – is represented by this claimed invention's total set of limitations of all its elements⁶⁾, i.e., of all elements of the claim, which claims the invention described by its specification¹²⁾. The notion of inventivity as such is not elaborated on, here, but already clarified as needed for patent laws, based on a pertinent German Highest Court decision, see “THE FSTP EXPERT SYSTEM”, www.as above.

2. Both Parties Err in their Interpretations of the Term “Control Signal”, Due to Ignoring the *Mayo* Decision’s Advice/Directives.

The term “control signal” is the most crucial term of the claimed ‘902 invention. Its peer inventive concept represents its usefulness, i.e., the enormous improvement over prior art it embodies (*see* clause **(b’)** of SSBG’s Principal Brief at pp. 17-18). That these peculiar limitations⁹⁾ (of this part of the total ‘902 inventivity¹¹⁾ embodied by this term) are disclosed legally shows clause **(b)**, p. 15, in this Brief.

As an aside, they are the limitations of this part of the total inventivity¹¹⁾ of the claimed ‘902 invention – totally ignored at the ‘902 priority date – that enabled Internet telephone calls (“VoIP telephony”) already at times, when it was still slow, and that still today are indispensable for business and/or emergency systems.

Neither of the two parties even tries to identify this absolutely crucial part of the total set of all ‘902 limitations¹¹⁾ embodied by the term “control signal”, but just replaces it by various prior art signals having quite different meanings – each totally useless for controlling telephone calls as irreconcilable with them (as the person of pertinent telephony skill and creativity knows), hence rendering the whole ‘902 invention useless. Hence, § 101 bars any prior art signal from being a part of the claimed ‘902 invention’s classical claim construction of both parties.

Thus, the final paragraph of section 1 holds also here, for section 2.

3. Both Parties Err in their Interpretations of the Term “Changing-over”, Due to Ignoring the *Mayo* Decision’s Advice/Directives.

The inventive concept represented by the term “changing-over”⁶⁾ – actually, the ‘902 specification discloses a compound³⁾ inventive concept deserving/requiring a longer descriptive identifier, but we are discussing here only one of its elementary limitations alias inventive concepts,³⁾ namely that the ‘902 invention keeps track of all its individual communications connections being subject to their ‘902 control (as section 2 just explained) – is described by the clause (c’) on p. 18 of the SSBG’s Principal Brief. Legally the inventivity embodied by this term is disclosed correctly, as shown in clause (c) on p. 15 of SSBG’s Principal Brief.

Neither of the parties even tries to identify this equally crucial ‘902 limitation of the total ‘902 inventivity¹¹⁾ embodied by the term “changing-over”, but just replaces it by the various prior art changing-overs, each having a quite different meaning – totally useless for controlling the communications connection of a telephone call as irreconcilable with the former (as the person of pertinent telephony skill and creativity knows), hence rendering the whole ‘902 invention completely useless. Hence, § 101 bars these prior art changing-overs from becoming part of the claimed ‘902 invention’s claim construction according to *Markman/Phillips*.

Thus, the final paragraph of section 1 holds also here, for section 3.

4. Both Parties Err in their Interpretations of the Term “Packet-/Line-Switching Network”, Due to Ignoring the *Mayo* Decision’s Advice/Directives.

The inventive concept represented by the term⁶⁾ “packet-/line-switching network” is described by the clause (d’) on p. 19-20 of the SSBG’s Principal Brief. Legally the part of the total ‘902 inventivity¹¹⁾ embodied by this term is disclosed correctly, as shown in clause (a) on p. 14 of SSBG’s Principal brief.

Neither of the parties even tries to identify this specific ‘902 limitation of the total ‘902 inventivity embodied by the term “packet-/line-switching network”. Instead, both parties construe meanings of this ‘902 term out of the blue and of amazing absurdity. Its “freestyle” meaning represents in no way that part of the claimed ‘902 invention’s inventivity¹¹⁾, which is specifically embodied by this term “packet-/line-switching network” (resp. its peer inventive concept as provided by the ‘902 specification and required by *Mayo* to be included in the claim construction, here for the ‘902 invention). In other words, neither of the parties even tries to recognize this very specific limitation⁹⁾ represented by the term “packet-/line-switching network” in its ‘902 claim construction – all their freestyle meanings of this term deal with telecommunications trivialities, which have absolutely nothing to do with the specific ‘902 meaning of this ‘902 term, i.e., with the part of the total ‘902 inventivity represented by this term resp. its peer concept⁴⁾.

Two short additional remarks as to this term may be in place – although the preceding sections 1-3 already provided sufficient evidence that both parties' '902 claim constructions are legally untenable – as they show the absurdity of their interpretation of this term, too convincingly to be skipped. They both comment on their "anchor argument" that the claimed '902 invention reads on an ISDN's alleged packet-switching and line-switching networks on which to execute the telephone call of claim 68.

- The person of ordinary skill and creativity knows that any ISDN's packet switching functionality is controlled by the X.25 protocol, which has the important and hence non-suppressible data transmission feature of “packet deletion if only a single bit error therein occurs during transmission and recovery of this dropped packet by retransmission out of sequence”. This is totally irreconcilable with transferring a telephone call's voice data over this packet switching functionality, as the '902 invention inevitably must do (once it enters into the voice section of a telephone call). The reason being that a couple of bit errors in voice data packets are not a problem as not noticeable by the communicating persons while dropping this whole packet causes, with the receiving person, a short loss of the acoustic signal – a problem, which then is inevitably worsened to an unacceptable degree by this packet's out of sequence retransmission (often occurring several times) causing lots of noise.

- Hence, none of the thousands of ISDN technicians ever suggested transmitting voice data of a telephone call – i.e., data of the by far most important telecommunications application!!! – over an ISDN's packet-switching connection. One of ordinary skill knows that the received acoustic signal is garbage¹²⁾.

Consequently, both parties' interpretation of the '902 term "packet-/line-switching network" renders the claimed '902 invention totally useless¹²⁾, making it failing its § 101 test. Hence, it is inadmissible according to the *Markman/Phillips* decisions.

Thus, the final paragraph of section 1 holds also here, for section 4.

These 4 *Mayo* decision oriented sections are terminated by an important remark about the practical impact of the *Mayo* decision, not evident from them. It is concerned with the facilitation of the everyday work of any patent practitioner,

¹²⁾ The “usefulness” of a claimed invention – i.e., embodied by it – is, just as its inventivity¹¹⁾, represented by this claimed invention’s total set of limitations of all its elements. Consequently, from the definition of the inventive concepts⁶⁾ making-up this claimed invention¹¹⁾ follows that anyone of them contributes, by its contribution to the total set of limitations of the claimed invention, equally to the claimed invention’s usefulness, too, as required by § 101.

The *Mayo* decision invokes, for its refined claim construction for a claimed invention, this additional “contribution to its usefulness” minded view at its claimed invention’s inventive concepts – which nothing changes with their hitherto only “contribution to its total limitations” minded pragmatics, remaining true for the more basic classical claim construction for it. It evidently is this additional “contribution to its usefulness” minded pragmatics of the inventive concepts, by which the Supreme Court achieves the purposefulness of its refined claim construction.²⁾

which the Supreme Court induced by its *Mayo* decision implied refinement of the (only *Phillips* driven) pre-*Mayo*/classical claim construction to the (additionally *Mayo* driven) post-*Mayo*/refined claim constructions. While, for showing that a claimed invention meets all §§ 101/112 requirements,⁴⁾ the

- classical claim construction assumes that the inventivity¹¹⁾ of this claimed invention becomes already by its limitations apparent to patent lawyers/examiners/judges – but whereby, in their brains, limitations have difficulties to build up resp. animate subcortically controlled recognition processes, here called “intuitions”, as limitations are based on negations of properties of the elements of the claim’s wording – whereas the
- refined claim construction automatically engages, by its inventive concepts, these patent practitioners’ such intuitions while drafting/analyzing/defending a patent’s claimed invention – as these inventive concepts expose their contributions to the claimed invention’s total usefulness¹²⁾ in a positive way, which makes it for the patent practitioners’ brains significantly simpler to build up resp. animate subcortically controlled recognition processes of properties of the elements of the claim’s wording. This process is stimulated, – in particular, by the **brain automatically recognizing that** these positive properties **are the meanings with the negations of which it was previously struggling.**

This invocation of the patent professional's intuition, when analyzing a claimed invention, does not only counteract any pretense of illegally broadening of terms' meanings by "managing the sequence of claim limitations"⁴⁾ and hence the misuse of the BRI guideline, but also animates the sharpness of his/her ability for criticism and creativity, thus increasing the comfort and efficiency of his/her work.

5. Both Parties Erred in Assuming that SSBG had Waived any Arguments and that SSBG Violates the BRI Guideline by Unduly "Reading Limitations into the '902 Claims"

CISCO seeks to avoid the proper construction of the terms "telephone call" and "data transfer with real time properties" by insisting that SSBG waived claim construction arguments by failing to raise them before the BPAI. But, SSBG made the same arguments to the BPAI (A7150, SSBG Appeal Brief) that it is making before this Court and has not waived them.

CISCO cites *In re Baxter Int'l, Inc.*, 678 F.3d 1357 (Fed. Cir. 2012) for its waiver argument. However, in *Baxter*, the party failed to raise the construction of a particular claim term as an issue before the BPAI, whereas here, the construction of these terms was raised before the BPAI. Additionally, SSBG is arguing the same concept on appeal as before the BPAI (A7150) and, thus, has not waived "a

claim construction argument.” *Harris Corp. v. Ericsson Inc.*, 417 F.3d 1241, 1250 (Fed. Cir. 2005).¹³⁾

CISCO also contends that SSBG waived its right to argue the proper definition of the terms “communications connection” and “control signal” because SSBG failed to propose its proffered construction to the BPAI. Without conceding that an argument was not made before the BPAI, SSBG notes that “appellate courts may apply the correct law even if the parties did not argue it below and the court below did not decide it, but only if an issue is properly before the court.” *Golden Bridge Technology*, 527 F.3d 1318 (Fed. Cir. 2008), quoting *Forshey v. Principi*, 284 F.3d 1335, 1355 (Fed. Cir. 2002). Thus, where an issue of claim construction (a strictly legal issue) is before this Court, the correct law may be applied (i.e., the claim term may be properly construed). In any event, here, the terms “communications connection” and “control signal” were raised before the BPAI. In particular, SSBG argued that “communications connection” referred to a particular telephone call between two end terminals, i.e., a single end-to-end communication (A7133 at n.2), and SSBG argued that the “control signal” for changing-over required that the change-over occur “without interruption” of a call

¹³ Also, this Court has recognized that an appellate court retains discretion over whether to apply waiver on a case-by-case basis. *Harris* at 1251.

set-up procedure and maintained “communications connection” (A7151). SSBG is arguing the same concepts on appeal that it argued before the BPAI.

Without this understanding of “communications connection” in the context of the ‘902 Patent, the BPAI’s construction of the larger phrase is without meaning and divorced from the teachings of the patent and legally erroneous under *Phillips*. CISCO argues that SSBG is “rewriting the claims to something other than the actual claim language.” CISCO Br. at 38. This is incorrect. It is fundamental that claims are not to be read in a vacuum and that the specification breathes life and meaning into the words of the claims.

CISCO argues that SSBG seeks to have “control signal” construed to mean more than a “signal.” CISCO is not correct because SSBG is not seeking that the term “control signal” be defined to include additional features of the claims. SSBG simply seeks that the term “control signal” be construed in a manner consistent with the other terms of the claim, such as “communications connection,” “changing-over,” and “without interruption.” “The person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but [also] in the context of the entire patent, including the specification.” *Phillips* at 1313, emphasis added. The term “control signal” must be construed in a manner consistent with the specification to include the inventive concepts of the claimed invention. The concepts include the real-

time changing-over of an ongoing telephone call from a packet-switched network to a line-switched network without interruption of a end-to-end communications connection. A4195 at col. 9, ll. 48-58. As claimed, “control signal” and “communications connection” require the automatic change-over during an end-to-end communication without interruption of the communications connection.

CISCO argues that SSBG’s claim construction of a “packet-/line switching network” improperly incorporates limitations from the specification into the claims. CISCO is mistaken. The proper construction does not require limitations to be read into the claims, but rather requires the person of ordinary skill in the art to simply read these terms in the context of the specification. *Phillips* at 1313. The specification of the ‘902 patent is clear that the packet switching network and the line switching network are separate and distinct networks. *See, e.g.*, A4191 at col. 1, l. 67 – col. 2- l. 4; A4194 at col. 7, ll. 49-52. Without this meaning, inventive concepts of the patent, such as changing-over, are detached from their meaning and the invention is wrongly rendered to an abstract idea.

CISCO contends that the BPAI was correct to rely upon a portion of the specification (A4192 at 3:10-13) that describes the prior art (the ‘260 patent) not the claimed invention. The BPAI’s reliance on the prior art was misplaced and legally incorrect. CISCO also wrongly relies on other portions of the Specification because CISCO takes these sections out of context. For example,

CISCO contends that the '902 patent refers to an "ideal" situation in which the network only consists of switches that perform both line-switching and packet-switching. CISCO Brief at pp. 26-27, citing A4192 at 4:27-31 and A4194 at 8:6-11. However, these portions of the Specification only describe a change-over from the Internet packet-switched network to the ISDN/POTS line-switched network. A4192 at col. 4, ll. 27-36. The capability of the switches to perform both line-switching and packet-switching does not create a single network consisting only of switches. *See* A4188 at Fig. 4; A4194 at col. 8, ll. 25-31.

B. Under the Correct Construction of the '902 Terms Discussed in Section A., the BPAI's Findings that Jonas, Farese, Matsukawa, and Yoshida Anticipate the Appealed Claims of the '902 Patent Cannot Be Sustained.

Neither party's brief nor the BPAI's Decision argued that one of these 4 prior art references anticipates an appealed claim of the '902 patent, when it is interpreted by using the '902 terms' meanings as correctly construed in SSBG's Principal Brief and here once more in A., in particular the '902 meaning of the 4 key '902 terms "telephone call", "control signal", "changing-over", "packet-/line-switching network".

In other words: Both parties' briefs used meanings of these 4 key '902 terms quite different from their '902 meanings, as explained in detail in A. and before in SSBG's Principal Brief. Hence, neither party only discussed one of these appealed '902 claims – much less showed any one of the claims to be anticipated by any of the prior art references.

C. The BPAI's Finding that Jonas Anticipates Claims 100 and 102 of the '902 Patent Is Not Supported by Substantial Evidence.

Both parties contend that SSBG waived its arguments regarding claims 100 and 102 on substantial evidence, but they raise this "waiver argument" for the first time on appeal. This argument was not raised by either the USPTO or CISCO before the BPAI. Thus, both parties have waived the "waiver argument" with regard to claims 100 and 102. *In re Watts*, 354 F. 3d 1362, 1367 (Fed. Cir. 2004) ("[I]t is important that the PTO in general be barred from raising new arguments on appeal to justify or support a decision of the Board."). *See also Riemer v. Illinois Dept. of Transp.*, 148 F. 3d 800, 809 (7th Cir. 1998) (citations omitted) (A defense of waiver can itself be waived by not being raised.).

Even on the merits, both parties' contentions are wrong. SSBG's Appeal Brief contained the following section "Claims 100 and 102 Are Not Anticipated by Jonas." (A7174-75.) There, SSBG chose to rely, partially, upon its arguments about the deficiencies of Jonas that were made with regard to similar limitations contained in different claims. Both parties contend that SSBG's failure to fully write-out its arguments waive the issue, relying on *in re Lovin*, but that case is inapplicable because it related to an appeal where the BPAI considered arguments made by the patentee to have been waived under 37 C.F.R. § 41.37 for failing to make specific arguments regarding certain dependent claims. Thus, *in re Lovin* relates to whether the BPAI properly refused to consider the patentee's arguments

with regard to certain claims under Rule 41.37. But here, detailed arguments were made (some by specific reference to other claims) and considered by the BPAI. The BPAI made no ruling that SSBG had not complied with Rule 41.37 but considered SSBG's arguments: a decision of the BPAI that SSBG's arguments were properly made in full compliance with the rules. Actually, both parties' arguments might perhaps have been raised before the BPAI but were not.

The '902 claims require a change-over during data transmission of a communications connection. A27-29; A11-A12.

- While the BPAI relies on FF7-FF11, none of these include a finding that Jonas discloses that his sending router would, on detecting a signal indicating some data blockage, automatically change-over from packet-switching to line-switching with a communications connection without interrupting it. Thus, the BPAI's conclusion is not supported by any evidence.
- CISCO relies upon the same section of Jonas designated by the BPAI as FF11. However, nowhere in FF11 does Jonas disclose that the sending router may automatically cause an existing communications connection to change-over from packet- to line-switching data transfer, due to two reasons. Firstly, Jonas' routers don't know, which of the data packets they forward belong to what communications connection (i.e., they don't know communications connections, at all), but forward individual data packets (irrespective of their

affiliations, col. 4, lines 53-55) to the one or the other network as designated by the user or the application. Secondly, Jonas' routers never change such designations by the user or the application, i.e., Jonas' routers never make this designation on their own, but always leave it to a user (col. 3, lines 16-19) or an application (col. 4, lines 38-52). I.e., Jonas discloses that a new connection is made over the bypass network and used for transferring over it individual packets accordingly designated by a user or an application, must not be misinterpreted as disclosing automatically changing-over a communications connection and all data packets affiliated to it.

CISCO relies upon a disclosure contained in col. 5, lines 8-12 for disclosing that a change-over of individual data packets may occur without interruption of a communications connection (if there should be any) – but misinterprets it in exactly the way just explained: This disclosure does not tell that Jonas' sending router has caused an automatic change-over of all the data packets incoming to a communications connection (as disclosed by the '902 specification in col. 9, lines 53-56, when it detects a data blockage therein). Instead it unmistakably states the contrary by saying: “. . . *and integrate data packets from this connection into the packets received from the packet-switched connection*”, which confirms that this connection has not at all (been) changed-over.

Contrary to CISCO's assertion, SSBG's argument is not inconsistent, but it demonstrates the fundamental misinterpretation by the BPAI, CISCO, and the USPTO.

- For example, Jonas does not disclose end terminals of a telephone call. CISCO cites the "hosts" of Jonas, but as discussed in SSBG's Principal Brief, hosts cannot be the end terminals required by the '902 invention as they cannot be used as telephony end terminals.
- Further, Jonas does not disclose the required "changing-over" of a telephone call. The '902 changing-over describes, by the '902 specification, changes-over of only a particular communications connection, i.e., telephone call (col. 9, lines 53-56). Jonas does not disclose such an individual communications connection's changing-over, and neither party denies this.
- There is also no support for the BPAI's finding that Jonas' disclosure of a device capable of sustaining "interactive or other time-critical applications" amounts to being capable of sustaining a telephone call. This finding is detached from the '902 notion of a "telephone call", as explained in section 1 of A. above.

III. CONCLUSION AND STATEMENT OF RELIEF REQUESTED¹⁴⁾

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 overturn the BPAI's decision that substantial evidence supports the anticipation of claims 100 and 102 by Jonas.

Respectfully Submitted,

July 29, 2013

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¹⁴ Prof. Sigrum Schindler, one of the inventors of the '902 Patent, should be recognized for his significant contributions to this Brief.

CERTIFICATE OF SERVICE

I certify that on this 29th day of July, 2013, in accordance with Fed. R. App. Pro. 25(c)(1)(D) and Federal Circuit Rule 25(a), the foregoing **REPLY 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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CERTIFICATE OF COMPLIANCE

I certify that the foregoing **REPLY 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 6,788 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 **REPLY 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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