No. 13-298

IN THE
Supreme Court of the United States

ALICE CORPORATION PTY. LTD,
Petitioner,
v.
CLS BANK INTERNATIONAL, et al.
Respondents.

On Writ of Certiorari to the United States Court of Appeals for the Federal Circuit

BRIEF OF AMICUS CURIAE SIGRAM SCHINDLER BETEILIGUNGSGESELLSCHAFT mbH, IN SUPPORT OF NEITHER PARTY

Chidambaram S Iyer*
Sughrue Mion, PLLC
2100 Pennsylvania Ave, NW
Suite 800
Washington, DC 20037
Tel: (202) 293-7060
ciyer@sughrue.com

Attorneys for Sigram Schindler Beteiligungsgesellschaft mbH

*Counsel of Record

January 28, 2014

i. TABLE OF CONTENTS PAGE

ii. TABLE OF AUTHORITIES

iii. STATUTES

iv. OTHER AUTHORITIES

[1] S. Schindler: "US Highest Courts' Patent Precedents in *Mayo/Myriad/CLS/Ultramercial/LBC*: 'Inventive Concepts' Accepted – 'Abstract Ideas' Next? Patenting Emerging Tech. Inventions Now without Intricacies" *).

[2] "Advanced IT" denotes IT research areas such as AI, Semantics, KR, DL, NL, …

[3] R. Brachmann, H. Levesque "Knowledge Representation & Reasoning", Elsevier, 2004.

[4] "The Description Logic Handbook", Cambridge UP, 2010.

[5] S. Schindler: "Math. Modeling Substantive Patent Law (SPL) Top-Down vs. Bottom-Up", Yokohama, JURISIN 2013*).

[6] "THE FSTP EXPERT SYS.", pat. appl. *).

[7] "AN INNOVATION EXPERT SYS., IES, & ITS DATA STRUC., PTR-DS", pat. appl.*).

[8] J. Schulze: "TECHNICAL REPORT #1.V1 ON THE '882 PTR AND THE UI OF THE IES PROTOTYPE", in prep.

[9] "Patent Business – Before Shake-up"*)

[10] Amicus Brief to CAFC by SSBG in *LBC*, 28.05.2013*).

[11] "INVENT. CONCEPTS ENABLED SEMI-AUTOMAT. PATENT TESTS", pat. appl.*).

[12] C. Correa: "Research Handbook on the Protection of IP under WTO Rules", EE, 2010.

[13] N. Klunker: "Harmonisierungsbestreb. im mater. Patentrecht", MPI München, 2010.

[14] USPTO/MPEP: "2111 Claim Interpretation; Broadest Reason. Interpr. [R-9], 2173.01"*).

[15] S. Schindler: "KR Support for SPL Prece-

dents", Lisbon, eKNOW-2014*).
[16] J. Daily, S. Kief: "ANYTHING UNDER THE SUN MADE BY HUMANS: PATENT LAW DOCTR. AS ENDOGEN. INSTITUTIONS FOR COMMERCIAL. INNOVATION"*).
[17] *En Banc* Hearing in *LBC*, CAFC, 12.09.2013.
[18] Amicus Brief to the Supreme Court by SSBG in *CLS*, 07.10.2013*).
[19] Amicus Brief to the Supreme Court by SSBG in *WildTangent*, 23.09.2013*).
[20] "Intellectual Property and the US Economy: INDUSTRIES IN FOCUS", USPTO, 2012*).
[21] K. O'Malley: Keynote Address, IPO, 2013*).
[22] S. Schindler, "*The View of an Inventor at the Grace Period*", Kiew, 2013*).
[23] S. Schindler, "*The IES and* its *In-C Enabled SPL Tests*", Munich, 2013*).
[24] S. Schindler, "*Two Fundamental Theorems of 'Math. Innovation Science'"*, Hong Kong, ECM-2013*).
[25] S. Schindler, A. Paschke, S. Ramakrishna, *"Formal Legal Reasoning that an Invention Sat. SPL"*, Bologna, JURIX-2013*).
[26] S. Schindler, "*Semi-automatic Custom. of LACs that a Claimed Invention Sat. SPL, … in-Cs* ", in prep.
[27] T. Bench-Capon, F. Coenen: "*Isomorphism. and Legal Knowl. Based Systems*", AI&Law, 1992*).
[28] N. Fuchs, R. Schwitter. "*Attempt to Control English*", 1996.
[29] A. Paschke: "*Rules and Logic Programming for the Web*". 7. ISS, Galway, 2011.
[30] K. Ashley, V. Walker, "*From Information Retrieval to Argument Retrieval for Legal Cases: …..*", Bologna, JURIX-2013*).
[31] Hearing in Oracle vs. Google, "As to Copyright-ability of the Java Platform", CAFC, 6.12.2013.

[32] S. Schindler, "*A KR Based Innovation Expert System (IES) for US SPL Precedents*", Phuket, ICIM-2014*).
[33] S. Schindler, "*Status Report About the FSTP Prototype*", Hyderabat, GIPC-2014*).
[34] S. Schindler, "*Semi-Automatic Generation /Custom. of All Confirm. LACs*", Moscow, 2014.
[35] S. Schindler, "*Substantive Trademark Law STL), Substantive Copyright Law (SCL), and SPL – STL Tests Are True SCL Subtests, and SCL Tests Are True SPL Subtests*", in prep.
[36] S. Schindler, "*Inventive Concepts are not Just Inventive – They are Multi-Mongrels*", in prep.
[37] D.-M. Bey, C. Cotropia, "*The Unreasonableness of the BRI Standard*", AIPLA QJ 2009*)
[38] Transcript of the Hearing in TELES vs. CISCO/ USPTO, CAFC, 8.1.2014*).
[39] Transcript of the *En Banc* Hearing in CLS vs. ALICE, CAFC, 8.2.2013*).
[40] Brief to the CAFC of SSBG in the '453 case*).
[41] Brief to the CAFC of SSBG in the '902 case*).
[42] Amicus Brief to the CAFC of SSBG in the *CLS* case, 06.12.2012*).
[43] "SEMI-AUTOMATIC GENER. / CUSTOM. OF (ALL) CONF. LEGAL ARGUMENT CHAINS (LACS) IN AN INVENTION'S SPL TEST, ENAB. BY ITS "INV. CONCEPTS", pat. appl.*).
[44] R. Radar, Panel Discussion " *LESI Conference on Life Science Patents*", Berlin, 11.12.2012.

*) see: www.FSTP-Expert-System.com

STATEMENT OF IDENTITY AND INTEREST

Sigram Schindler Beteiligungsgesellschaft mbH and its subsidiaries (collectively "SSBG") are research-based high technology companies located in Berlin, Germany, developing and selling products also in the US, primarily via TELES AG. SSBG is a majority shareholder of TELES AG, founded 1983 by Sigram Schindler[1)].

SSBG's business is dependent upon patent protection, in particular in the United States and Europe. Strong patent systems require that the patents issued are consistently interpreted. Thus, SSGB has a vested interest in supporting the US patent system in its on-going development in adjusting itself to the needs of the emerging technologies. This Court indicated by its groundbreaking *KSR/Bilski/Mayo* decisions what these needs are and how it requires meeting them by precedents as to 35 USC §§ 101/102/103/112. This Amicus Brief aims at supporting this development by showing that these Supreme Court requirements provided to US SPL precedents an Advanced IT basis facilitating it.

This brief, in support of neither party, is filed on behalf of *Amicus Curiae* SSBG – which has no financial interest in either side.

---

[1] Pursuant to Supreme Court Rule 37.6, amicus curiae states, that no counsel for a party authored this brief in whole or in part, and no entity or person other than amicus curiae, its members, and its counsel, made any monetary contribution toward the preparation or submission of this brief. Both parties have provided blanket consent to the filing of Amicus Briefs.

SUMMARY OF THE ARGUMENTS

The question presented by the Supreme Court to be answered by this Amicus Brief asks

"Whether claims to computer-implemented inventions – including claims to systems and machines, processes, and items of manufacture–are directed to patent-eligible subject matter within the meaning of 35 U.S.C. § 101, as interpreted by this Court"

The primary issue of this question thus is, what properties of a computer-implemented invention ("**CII**") make it being patent-eligible or non-patent-eligible subject matter[2]. This brief leverages on the *Mayo* decision's clear requirement to identify these properties of a claimed invention by its "inventive concepts" – as the first step in construing its claim construction – and to determine its patent-eligibility by them. In *Mayo* these requirements are focused on pharmaceutical subject matter, though its reasoning applies to any invention, also all "model based" ones, i.e. to all emerging technology inventions' tests under § 101, such as to **CIIs**.

The *Mayo* requirements also bring Substantive Patent Law ("**SPL**") precedents into line with Advanced IT [2-4]. Nevertheless, the merits of *Mayo,* also as to the above question, still are difficult to appreciate by many US patent practitioners.

---

[2] A side issue this question asks for is, why distinguishing, as to CIIs' patent-eligibility, between CII incarnations being systems and machines resp. processes resp. items of manufacture. This brief's elaborations logically imply: There is no scientific rationale for such a distinction.

Hence, this Amicus Brief explains once more [e.g. 18,19], now by practical examples, why the Supreme Court by *Mayo* had to require that testing a claimed invention for patent-eligibility – e.g. a CII – indispensably must construe its claim construction and the latter must be significantly finer than the classical *Markman/Phillips/KSR* claim construction.

Mayo thus

- took US patent precedents to a level of development enabling predictable and consistent patent precedents for all claimed inventions, i.e.
- has established a guidepost as to interpreting US SPL for claimed emerging technology inventions.

Mayo namely logically implies: As to a claimed invention's (computer-implemented or not) § 101 test – hence also its §§ 102/103 test – there are two sources of potentially disastrous failures:

I.) Not to start it (or said §§ 102/103 test) by construing for it its § 112 claim construction, or

II.) not to refine this § 112 claim construction as *Mayo* requires – a failure increased if also the USPTO's "Broadest Reasonable Interpretation, BRI" guideline [14] is applied, thus not refining but coarsening this § 112 claim construction.

Note: The result of this § 112 test evidently decisively impacts on its §§ 101/102/ 103 tests.

Mayo thus enormously improved the quality of US SPL precedents – by its forcible exclusion of these 3 test failures by its procedural requirement.

Leveraging on *Mayo*, the CONCLUSION then answers the Court's question not only for CIIs but also for all model based inventions, and not only for testing them under § 101 but also under §§ 102/103.

ARGUMENTS

I. SUMMARY OF SSBG'S BRIEFS AS TO SPL TESTING OF CLAIMED INVENTIONS

By its *Mayo* decision this Court has decided that a claimed invention – e.g. a CII – is patent-eligible if and only if it meets two requirements: It

- embodies at least one patent-eligible "inventive concept", i.e. is not a natural phenomenon, and
- is not an "abstract idea" only.

These two requirements' key terms/notions[3)] – marked-up by quotation marks and irrelevant in SPL precedents prior to *Bilski/Mayo* – were not really self-explaining when used by these Supreme Court decisions. Hence, their explanations has been provided by SSBG's two Amicus Briefs to this Court as to this § 101 question [18,19]. These explanations showed that the new terms/notions "inventive concept" and "abstract idea" precisely concur not only with Highest Courts' SPL precedents, but also with the well known peer terms/notions in Advanced IT [2-4], "concepts" and "well-foundedness" – enabling mathematical KR modelling of SPL precedents.

The next two bullet points summarize basics of these new terms/notions, which *Mayo* requires to be used in a claimed invention's § 101 test [18,19].

Before recapitulating these basics: Clarifying these two *Mayo* terms/notions is not the focus of this Amicus Brief – as it was in SSBG's two preceding Amicus Briefs [18,19] – but firstly •) to answer the above question of the Supreme Court in a way indis-

putable from the SPL precedents as well as from the Advanced IT/Mathematics points of view, and secondly •) also to show that meeting these *Mayo* requirements equally eliminates the identical problems with an invention's test under §§ 102/103, arising from its committing an above failure **I.) / II.)**.

This undisputable answer is achieved by this Amicus Brief, in the light of the *Mayo* decision, as follows. After the just mentioned short recapitulation of basics of these two new *Mayo* terms/notions, Section II will show that even if a § 101/102/103 test were properly started by a classical claim construction – which is not the case in Sections III and IV, as they totally ignore resp. only mention claim construction – the BRI may cause confusion additional to the confusion resulting from the classical claim construction performing too few and too sloppy tests [19,25]. Sections III and IV then demonstrate what the consequence may be if the failure **I.)** resp. **II.)** is committed when running, for a claimed invention, one of the 3 §§ 101/102/103 tests – in particular if the claimed invention is model-based, e.g. is a CII.

Now to the basics of the two new *Mayo* terms:

- **The *Mayo* Term "Inventive Concept".** The 1. Amicus Brief [18] primarily explains the legal advantages of inventive concepts in terms of the usefulness requirement stated by the § 101, which comes along with the notion of this new term**3)** and the SPL paradigm refinement it represents. Inventive concepts, as understood by *Mayo***3)-6)** (see also [6], ftn 4), are the incremental units of the claimed invention's total usefulness. Separating them from each other – i.e. by disaggregating the compound inventive concepts

of the elements of the claimed invention into their respective conjunctions of independent of each other elementary inventive concepts – enables separating, for any claimed invention, its patent-eligible from its non-patent-eligible elementary inventive concepts. This fundamental *Mayo's* requirement is to be met by any claimed invention's claim construction.

Thus, this Amicus Brief explained that and why determining a claimed invention's inventive concepts, as the first step in construing the claim construction for it as required by *Mayo*, enforces an increase of its conciseness and coherence (see also the summary of the 2. Amicus Brief below),

At its beginning, the 1. Amicus Brief also explained, why this increased conciseness and coherence is indispensable for SPL tests of model based claimed inventions (including their §§ 101/102/103 tests), as these always deal with at least partially intangible/invisible subject matter of emerging technologies, also holding for CIIs.

- **The *Bilski/Mayo* Term "Abstract Idea".** The 2. Amicus Brief [19] primarily explained, on top the just said, that achieving consistency in SPL precedents is impossible unless granting preemptive patents is avoided and that this requires separating also the 10 elementary SPL concerns – in their logical conjunction making up the 4 compound SPL concerns defined by the 4 §§ 101/102/103/112 – from each other and testing a claimed invention whether it satisfies all 10 of them, which in particular implies testing the claimed invention by its elementary inventive concepts for its being nonpreemptive.

Consequently, by its end, this 2. Amicus Brief also finishes with the unreasonable discussion of the term/notion "abstract idea", in spite of its reasonable use in *Bilski/Mayo*[3)-6)] – although sometimes puzzling, admittedly, due to brevity.

In a claimed invention's patent-eligibility test, of these two new *Bilski/Mayo* terms/notions – "inventive concept" representing its increments of usefulness, and "not [being] an abstract idea only" representing its global well-foundedness – the

- first one excludes the problem primarily causing the above question about it, i.e. excludes committing the above failures **I.)** and **II.)**, and the
- second one often enables deciding, by the NAIO test, its being well-founded or not (see below).

The exclusion of the failures **I.)** and **II.)** is necessary for the dependable answer to the Supreme Court's above question. The well-foundedness of a claimed invention (decidable only after the first step(s) of construing its *Mayo* conforming claim construction) is sufficient for its patent-eligibility, but achievable only in specific cases, e.g. for most CIIs.

This takes US SPL precedent to a higher level, as Sections III/IV show: Each CII therein individually •) determines by its "inventive concepts" its right basis for indisputably testing it under § 101/102/103 (tentatively ignoring them [25]), and •) passes its "not an abstract idea only, NAIO" test and hence is here nonpreemptive, i.e. patent-eligible.

The first *Mayo* term/notion is politically simpler than its "problem-solution" borne well-foundedness/"not-an-abstract-idea", with US patent experts suffering an "EPC stigma" (see the end of Section II).

II. THE BRI GUIDELINE CONTRADICTS THE HIGHEST COURT'S PRECEDENTS IN THE *PHILLIPS* AND *MAYO* CASES

Section I summarized that this Court took by its *Mayo* decision SPL precedents to a higher level of development and thus accommodates robust patenting emerging technology inventions. I.e., *Mayo*

α) confirms – by explicitly requiring to identify the "inventive concepts" representing the claimed invention's (potentially) patentable usefulness increments – what already *Phillips* has required by: "*The inquiry into how a person of ordinary skill ... understands a* ***claim term****[3)] provides an objective baseline from which to begin claim interpretation*".

This "***Phillips*** **opening statement**" – to first "*provide* ***AN*** [i.e. single] *objective baseline from which to begin claim interpretation*" – is often ignored, though different "baselines" or none at all may cause incoherent claim interpretations (see **i)**).

β) additionally requires to ensure by this "inventive concepts baseline" that the claimed invention resp. its claim is •) nonpreemptive (i.e. not an abstract idea only [5]), •) not non-patent-eligible (i.e. comprises at least one patent-eligible inventive concept), and •) patentable (i.e. its patent-eligible inventive concepts indicate it deserves patentability), as explained by Amicus Brief [19] and [25].

I.e.: Already by *Phillips* – amplified by *Mayo,* as of **α)** and **β)** – SPL precedents requires a claimed invention (when testing it for satisfying SPL), e.g. a CII, to be more carefully checked, i.e. to undergo more tests, than for construing for it (especially by BRI) the classical claim construction [25].

Thus, as explained by the end of this Section: The refined *Phillips*/post-*Mayo* claim construction is, compared to the classical/BRI one – especially for model based inventions – legally dramatically more

- **concise**, by first focusing on its inventive concepts disclosing its by § 101 required novelty and usefulness increments – so excluding legally misleading technical meanings of its claim's terms[3)-6)] – and
- **coherent**, by ensuring its § 112, its § 101, and its §§ 102/103 aspects are all "well-founded" [5, 25][3)].

---

[3] *Mayo* uses the term "inventive concept" only three times and often omits/replaces it by other terms, e.g. in "*... do the patent claims add enough* <inventive concepts> *to ....*", or "*... unless the process has additional features* <alias: inventive concepts> *that ...", "What else* <inventive concept> *is there ...",* or "*Those steps* <alias: inventive concepts> *included ...*". This tells: An invention's specification may embody inventive concepts by synonyms or even only implicitly.

A term together with its meaning is a "notion". A notion hence defines its term's meaning. In *Mayo* a notion is called an "inventive concept"[4)], if its meaning has the pragmatics to serve for defining the claimed invention's "§ 101 usefulness", this pragmatics being disclosed by the claimed invention's specification (unless known a priori by the person of ordinary skill and creativity). A notion – e.g. "inventive concept" – may be represented by different terms (= synonyms), as the preceding paragraph exemplifies.

In the above *Phillips* opening statement, the "claim term" is a "claim's term" representing an inventive concept[3)]. Other "claim's terms", not having that pragmatics, are no inventive concepts. The *Phillips* decision deals only with claim terms[3)] alias inventive concepts. For convenience it mostly leaves away the

These clarifications added by *Mayo* to claim interpretation unfortunately did not yet make it into the often quoted – massively questioned [21,37] – USPTO's "Broadest Reasonable Interpretation, BRI" guideline [14], originating pre *Phillips*. The BRI thus maintains its legal errors causing insinuation that some volitionally broadening of the meanings of claim terms were lawful (as practiced by the PTO, see Section IV) – although *Phillips* and now also *Mayo* require the contrary (while there is no US law supporting this BRI guideline, which might render these then unavoidable contradictions lawful). I.e.: Consistency and predictability of SPL precedents is impossible to achieve, if the BRI guideline remains as it is and used by courts as SPL precedents – what it definitively not is – as this Section's end explains.

---

leading "claim". But not in its opening statement, i.e. its "baseline" statement in **a)** and below in **i)**.

Just for information: A term in a claim may represent two different meanings, one meaning with and the other meaning without inventive concept pragmatics; it then can be seen as a claim term or as a plain claim's term. I.e., in claim interpretation its latter meaning is "contra *Phillips/Mayo*", hence there legally inadmissible.

The BRI guideline ignores this distinction and thus is often legally misleading. It thus insinuates that a claim's term always is a claim term. This unreasonably broadens the meanings of the claim terms (see Sections III/IV). *Mayo* bars this terminological "glitch" by introducing the term "inventive concept" as synonym to *Phillips'* "claim term". For "inventive concept" being legal items – not just factual ones – see [5,7,11,36].

The paragraphs **i)-iv)** elaborate on further – already pre-*Mayo* existing – contradictions between the just described guidance provided by BRI and *Phillips*. [37] provides more fundamental BRI critics.

i) The BRI guideline starts its legal opinion by quoting, in its "**BRI opening statement**" – as to the general requirement of determining a claim term's meaning by the claimed invention's specification – a statement from the *Phillips* decision in a misleading way[3)-6)]. It "*requires that … .) claims must 'conform to the invention as set forth in … the specification and the :) terms … in the claims … so that the meanings of the terms in the claims*.....". The second part of this quotation is misleading as it talks of "... *the meanings of the terms in the claims* ...", i.e. of volitionally stretchable meanings[3)-6)] of "claim's terms", not about "claim terms' meaning".

This is a misrepresentation of the *Phillips* decision, as it made this BRI opening statement

- only after it had repeatedly explicitly required to exclude such "free-style" term interpretations independent of the claimed invention. I.e.: By the *Phillips* opening statement "claim terms' meanings" must result from tying these terms' interpretations tightly to the claimed invention, i.e. must not contradict it (see Section IV) – as confirmed by *Mayo*[3)-6)] – and
- when it was considering the aspect of heavy use of the specification in claim interpretation. *Phillips* made this statement as to "It is … appropriate …, when conduction claim construction, to rely heavily on the written description for guidance to the meaning of the

claims" – which evidently in no way relaxes the above quoted "baseline" requirement tying claim terms' meanings tightly to the claimed invention's meaning.

ii) Another – quite similar – up-front deficiency of the BRI guideline is that the USPTO ignored the fundamental *Phillips* opening statement (quoted in α)) and choose for its BRI guideline the just explained BRI opening statement, which insinuates a claim's terms need not be subject to the much tighter limitations imposed on them by the *Phillips* opening statement. This may be even disabling the limitations of the claimed invention, as parts of the description without any relation to the claimed invention may also support claim terms and mislead the claim interpretation definitively away from the claimed invention – in spite of its being clearly described by the specification (see Section IV).

iii) Immediately after its BRI opening statement, the BRI guideline starts encouraging all the old confusions about claim interpretation – perhaps disappointed by the CAFC's *Phillips* ruling, as it refines the *Markman* rulings but offers no simple tests (which by [25] don't exist) – by referring to a series of 5 pre-*Phillips* decisions (going back to 1969) and confronting the reader again with the at that time occasionally murky claim interpretation, which to prevent for the future has been the main purpose of the *Phillips* decision – and now is also of the *Mayo* decision! It thereby indeed becomes "obscure" [21] by quoting from these very early decisions a mysterious sentence, forbidding: "*… thereby [to] narrow the scope of*

the claim by implicitly adding disclosed limitations which have no express basis in the claim". Though its underlined wording is indefinable[3)-6)], it insinuates the lawfulness of pre-*Phillips* feelings about claim interpretation, which contradict the clean/rational ruling of *Phillips.* It thus flushes the clarification provided by *Phillips* – as it thus reestablishes the murkiness of pre-*Markman/ Phillips* claim interpretation.

iv) Removing uncertainties caused by the BRI guideline requires also addressing another broad and surprising statement therein. It quotes the CAFC: "*The court held that the PTO is not required, in the course of prosecution, to interpret claims in applications in the same manner as a court would interpret claims in an infringement suit.*". While this quotation insinuates it were quite generally applicable, the CAFC seemingly has not intended it to be so understood. The BRI guideline namely continues quoting the CAFC: "*PTO applies to verbiage of the proposed claims the broadest reasonable meaning .....*". The CAFC thus rather intended it to be used by the USPTO only for clarifying claims being "*verbiage* "[4)].

---

[4] A patent specification may disclose several inventions. A first consequence is that a claim seeking patent protection for one of them must identify which one. This one then is called this claim's "claimed invention".

While this need to focus on a claim's "claimed invention" was recognized long time ago, it is only *Phillips* that recognized the second consequence. Namely, to focus in a claim's interpretation on interpreting its "claim terms"[2)] only – just as on its "clamed

i)-iv) are delicate: The *Phillips* decision does comment on the above BRI opening statement and thereby clearly states that the PTO itself introduced the BRI into this discourse, not the CAFC.

The above elaborations on the BRI intended to show only that claim construction requires – because of its pitfalls especially with model based claimed inventions – much more problem awareness and scrutiny than the current BRI guideline embodies. Since *Mayo* – α) and β) quote its requirements – this is untenable. *Mayo* namely clearly

---

invention". To this end *Phillips* calls such terms "claim terms" – see its "opening statement" quoted above and several more places in its decision – though it often skips the leading "claim", probably by evidence. *Markman* did not yet address this intricacy in claim construction, i.e. nowhere talks of "claim terms", i.e. ignores that a claim interpretation may need being thus focused – fixed by the *Phillips* decision by explicitly complementing a quoted *Markman's* "term" to become a "[claim] term".

Note: There are 4 situations covered ex- and/or implicitly by *Markman/Phillips* and implied by *Mayo* requiring deriving the meaning of a term in this "claimed invention focused way" from the specification (i.e. as indispensable for the functioning of the claimed invention): This claim term may be ex- or implicit to its claim's wording and its claimed invention's meaning may also be ex- or implicit to its specification.

The USPTO's BRI does not only just ignore *Phillips/Mayo* – but also encouraged the PTO's BPAI to legally totally overstretch a claim terms' meanings and hence interpret this claim's meaning to contradict its specification – without noticing it (shown in IV).

finishes[5] with the misbelief that the meanings of a claim's terms are derivable alone from this claim's wording. The BRI doesn't care – just as many patent experts, even judges – and insist in this misbelief and practice it incredible broadly (as demonstrated in Section IV). I.e., they simply ignore *Mayo* – as its inventive concepts definitively bar this misbelief[5],[6] – and frankly assert that *Mayo* had nothing to do with claim construction [38][6].

---

[5] As to this misbelief, linguists hint at sentences like "John sees Jim with his binoculars on the mountain": Therein the terms "sees" and "his" have no unique meanings. Without knowing the meaning of this sentence a priori, the meanings of its terms are not uniquely determinable. I.e.: By Advanced IT, the meanings of the terms in a sentence may be uniquely determinable only, if the meaning of the sentence is known.

Consequently, it was inevitable that *Phillips/Mayo* required that in claim interpretation the claimed invention's meaning, its "technical teaching", is known before determining the meanings therein of the claim's terms. I.e.: Patent judges/lawyers/examiners must precisely understand the claimed invention prior to beginning determining the meanings therein of the claim's terms. Sections III / IV show topical counterexamples.

[6] The mathematical definition of the notion “inventive concept” alias "claim term"[3],[4], as discussed in more detail earlier [5-11], is a dramatic simplification of the powerful notion of "concept" in DL or KR [2-4], as it here is customized to modeling SPL precedents, nothing else, i.e. only FOL predicates of constants, the elements of the claimed invention. In DL or KR, concepts serve for modeling how to recursively build compound concepts out of simpler ones.

By contrast, the Highest Courts' SPL precedents proceeds the opposite way: Modeling it, in particular

In total: The BRI contradicts *Philips/Mayo* by ignoring their much more concise claim constructions. Instead, it clings to the "classical"/*Yamamoto* one, proven by *KSR/Bilski/Mayo* to be deficient for model based claimed inventions. It thus causes huge

---

modeling the properties of the elements of a claimed invention, needs only the disaggregation of compound inventive concepts (which model compound such properties of the elements) into elementary inventive concepts (which model elementary such properties of the elements) [5-11]. And by § 112 any elementary such property of an element must be clearly defined. By trivial logic this means: This elementary property of this element must be describable by a mapping of its elementary concept's universe onto <T,F>, thus (by its truth set) precisely describing this elementary property of this element.

The so resulting conjunction of elementary properties of this element (of the claimed invention) may be created by a man – which by § 112 must be disclosed in an enabling manner – or by a natural phenomenon. If none of both options applies, then this inventive concept of the claimed invention does not meet the § 112 requirements – an "abstract idea" of an element's property disables describing it precisely. I.e., any set of elementary inventive concepts that allegedly defines the (meaning of the) claimed invention does pass its test under § 112 if and only if any element of this set is an inventive concept of one of these two kinds. Thus: A claimed invention cannot pass its test under § 112 (and §§ 101/102/103 [19,25]) unless it is made up from inventive concepts of one of both kinds – already testing a claimed invention under § 112 as required by *Mayo* excludes inventive concepts being "an abstract idea only). This clarification is crucial for understanding Subsection III.2.

discrepancies when getting, in construing for a claimed invention its claim construction, to testing it under § 101/102/103. This massive deficiency of classical claim construction is reemphasized, next.

Construing, for a claimed invention, a

- refined claim construction by means of testing it under §§ 112/101/102/103 yields a construction satisfying SPL, while construing for it just a
- classical claim construction by means of testing it under § 112 only yields a construction satisfying SPL or not. I.e., of this construction still must be shown that its claimed invention (for which it is supposed to stand) does pass also the other 3 tests or not. The crucial point in proceeding this way is that these 4 tests are not separable from each other, as shown earlier [19,25]. Thus this classical construction may have to undergo significant changes for enabling deciding whether it passes these 3 tests. This need to go back to its § 112 test [19,25] may easily be forgotten and then may render these 3 remaining tests faulty, and hence the claimed inventions whole SPL test[7)].

We conclude this Section II with critics on the BRI (based on SPL precedents, [11,37] base them on the Constitution) and on classical claim construction by a preview on Sections III and IV. They both show

---

[7] In none of these decisions the Supreme Court explicitly addresses this deficiency of classical claim construction. But, it is not its business to fix in detail such a problem, once it had indicated it – by ignoring it, in *Mayo,* and instead showing what a legally correct claim construction is, by refining the CAFC's *Phillips* decision and clearly stating its claim construction requirements.

that claim construction taken easy – as of **I.)** or **II.)** in the above SUMMARY – is disastrous. Both Sections prove that sloppy claim construction may irreconcilably derail CIIs' SPL tests: Section III deals with totally skipping it and hence completely ignoring the *Philips/Mayo* requirements, Section IV with only partially skipping it and using the BRI.

Sections III and IV thereby exemplify that this sloppiness as to claim construction is broadly practiced – though intellectually it is just a painfulness and hence practically often produces nonsense.

- Section III shows, how such legal sloppiness managed to cause the clash at the CAFC about patent-eligibility testing of the CII in the CLS case. Namely: By totally skipping claim construction and hence completely ignoring the *Phillips/Mayo* requirements that would have avoided it, if the CAFC had proceeded according to them.
- Section IV shows to which incredible extent the BRI allegedly entitles the forcible broadening of the meanings of a claim's terms – why its two cases are included into this Amicus Brief, although they deal with a CII's §§ 102/103 tests, not its § 101 test. In this case this BRI based broadening of claim terms even implies that, for the posc, the so BRI modified CII has nothing to do with what its specification repeatedly and unmistakably discloses as its CII, i.e. diametrically contradicts the specification.

Both bullet points together have lead already earlier the community of patent experts into similar debacles as in the CAFC, namely as to this Court's *KSR/Bilski/Mayo* decisions. I.e.: This ubiquitous sloppiness as to claim construction steadily under-

mines the understanding that they all require a concise and coherent claim construction, overcoming the evident deficiencies of the classical one [25][7].

This Amicus Brief does not allege that all problems of SPL precedents would disappear when claim construction were performed as required by *Phillips/Mayo,* in particular the BRI guideline would be fixed accordingly. As a matter of fact, Advanced IT research [5,25] shows that there are several serious problems ahead in applying for emerging technology patents and drafting them such that their claim constructions would be "Highest Courts proof". Some such problems are in principle already hinted at by the Supreme Court's above decisions, though they practically have not yet been noticed by SPL precedents – what definitively will happen – and which to handle the latter is not yet prepared for.

But, without finishing with this sloppiness as to claim construction and in particular removing BRI's current legally misleading insinuations – both evidently very persuasive – it will be impossible to find firm ground for resolving the problems ahead of SPL precedents for emerging technology inventions, even those identified already by the *KSR/Bilski/ Mayo/Myriad* decisions.

Note: Such increases in sophistication – as here discussed – are unavoidable during maturing of scientific disciplines, here of SPL precedents, currently undergoing partial scientification. They/It reflect/s that the rationality in SPL precedents increases, the objective truth embodied by SPL precedents is growing – and in these parts is no longer subject of change by political winds [16], as the history since the Enlightenment teaches.

III. ADULTERATING CIIs' SPL TESTS BY SKIPPING THE CLAIM CONSTRUCTION

The preceding paragraphs explained the demonstrative purpose of this Section III: To show what skew and controversial discussions can arise, if arguing about a claimed CII's § 101 test is started prior to establishing clarity about the claim terms' meanings of this CII[3),4)], i.e. prior to testing the CII under § 112 the *Mayo* conforming way. That even then executing the § 101 test would still require that the CII is of FFOL, has not even been noticed by SPL precedents, and is explained below.

This subsequent demonstration uses the *CLS* case (*CLS vs. Alice*) and deals with Alice's exemplary patent '479 and an exemplary claim (e.g. claim 33) identified in the first opinion in this case. This is the only '479 CII alias Alice CII considered in the sequel.

Subsection III.1 first outlines, which inventive concepts make up this Alice CII. By *Mayo,* determining these inventive concepts must be performed, first – in construing for Alice CII its refined claim construction – as they determine the meanings of the claim terms of the claim claiming Alice CII[3),4)]. Subsection III.1 also outlines the blueprint of what *Mayo* requires as claim construction in this case.

By a passage in its largest opinion Subsection III.2 then explains, why this opinion's thinking is far away from a *Philips/Mayo* conforming § 101 test of a CII – it logically actually contradicts.

The here shown adulterating of the '479 CIIs' SPL test due to skipping the claim construction for it holds for also the other CIIs' § 101 tests at issue, in *Ultramercial vs. Hulu* and *Accenture vs. Guidewire.*

III.1 The inventive concepts of the Alice CII and its *Mayo* conforming § 101 test

The meaning of the '479 CII is not controversial and clearly described by the specification.

This '479 CII's compound meaning (alias the technical teaching) of the '479 CII is made-up from the meanings of the '479 claim terms, i.e. from this CII's elementary inventive concepts[3),4)]. These must be identified/defined according to the *Phillips/Mayo* requirements – what happened already in the preceding Amicus Briefs in this case [18,42], are next quoted from there, and cannot here become elaborated on to a higher degree of detail, as this then would make this Amicus Brief represent Alice.

Quoting from [42], the 7 elementary inventive concepts ("**in-Cs**") of the '479 invention are the in-Cs: •) "shadow", •) "start of the day balance", •) "transaction based adjustment", •) "chronological adjustment", •) "end-of-the day reflect adjustment", •) "irrevocable time invariant obligations", and •) "ultimate exchange of obligations".

Evidently none of the in-Cs represents a natural phenomenon. But, anyone represents a fully by men created thought, which incrementally contributes to the '479 invention's total § 101 usefulness [18].

Assuming this set of elementary in-Cs passes all other § 112 tests (for what this exactly means see [25]), the necessary patent-eligibility condition for the '479 CII is fulfilled (see I. at the end of Section I).

The there also quoted sufficient condition II. for the CII to be patent-eligible – the CII passing the NAIO test [19] – is equally fulfilled, as

- the above consensus about the meaning of the '479 CII here also comprises that the problem it solves is clearly defined by its specification, and
- one immediately sees that this problem actually
  - is solved by the *Alice* CII, as it is of FFOL. Thereby a CII being of "Finite First Order Logic" means that
    - ❖ only finitely many in-Cs make-up the CII (i.e. only a finite number of claim terms of the claim claiming the CII, each claim term having a unique meaning determined as required by *Phillips/Mayo*[3),4)]), and
    - ❖ the set of these in-Cs is of FOL.
  - cannot be solved if one of the above 7 in-Cs is left away.

The claimed '479 CII hence passes the NAIO test, i.e. it is not an abstract idea only. By [5,25] this is sufficient for its being non-preemptive, i.e. for its being patent-eligible, as meeting *Mayo's* requirements[8)].

III.2 A Scholastic View at a Claimed Invention's "Inventive Concepts", "Being an Abstract Idea", and "*Mayo* conforming § 101 test"

The subsequent discussion of the scholastic view at *Mayo* by the largest opinion in this case – evidently irreconcilable with the hitherto by this Amicus Brief represented enlightened view at Mayo, as it seeming also is shared in part by dissenting opinions[8)] – shall facilitate getting acquainted with this increased enlightenment coming into SPL precedents along with the two *Mayo* key terms/notions discussed above: Once this getting acquainted with these rationality/scientification driven terms/notions

has happened, one immediately sees that they both are next to trivial, anyway self-evident[8)]. Just as riding a bike and swimming is trivial/self-evident,

---

[8] This Subsection III.2 explains why the CAFC's clash has been predictable and actually has been predicted [44], though not in the intensity and frequency as it then actually occurred. SSBG's position already then was that *Mayo*, with its "inventive concepts" approach to the patent-eligibility issue had shown the way how to separate patent-eligible from non-patent-eligible inventive concepts – namely by first disaggregation a claimed invention's compound inventive concepts into their elementary independent ones – and hinted at serious conflicts such simple truths may embody, e.g. the old Greeks' reluctance to accept that a refinement of the then rational number system is indispensable for integrating e.g. the theorem of Pythagoras into it.

I.e.: This CAFC clash just reproduces a natural phenomenon occurring in any cultural confrontation, here the confrontation of established SPL precedents thinking and a SPL customization of established KR/Mathematics thinking: Achieving an appreciation by one culture of the other culture's thinking takes much more time than logically justified. One reason may be the usual mutual unwillingness to elaborate on such an appreciation. But the fundamental reason has been observed since long time and has to do with what today is often called "knowledge recognition problem", as represented by Shannon's famous "natural number knowledge" test performed by English speaking Martians on English speaking Terrestrials. Overcoming such a problem may last years, unless a White Knight somehow interferes. Here it would have sufficed, if construing a *Mayo* conforming claim construction had been tried for the claimed '479 invention, as demanded by the Supreme Court. But, at CLS's *En Banc* hearing [39], this key question was no issue.

once one got acquainted to it. The only difference actually is that bikes and water are tangible/visible, while model based inventions, i.e. also CIIs, are vastly intangible/invisible – and hence require an increased amount of rationality/scientification.

This view applies most deserving scholastic metaphysics thinking – for thousands of years it has been the basis of culture and civilization. Yet, though rhetorically just excellent, this view did not manage to escape the classical "scholastic meta-physics trap" to believe that earlier thinking about an issue's meaning has already made its way into the natural language, and hence this issue's precise meaning may be derived from its description in natural language, i.e. is sufficiently subtle and hence needs no rationality based refinement – although the issue terms' meanings are not quite clear, normally simply ignoring this.

I.e.: This scholastic thinking has two serious deficiencies. •) Scientifically it is untenable, as it is founded on the misbelief that the meanings of terms used in arguing – here of the two new *Mayo* terms – can be derived from sentences using them, as explained earlier[5)] and elaborated on below. •) Socially it is infeasible here, as it is known not to be supportive as to unfolding the socially and/or economically creative potentials of a free society, in particular not of emerging technologies.

The second aspect is one of the main objectives of the patent system, as this Court reemphasized in *Mayo*, and hence repeatedly rejected structuring SPL precedents such as to fix some problems in the past at the cost of hampering the future.

The first aspect of this opinion's view on *Mayo* is disclosed in "*An Integrated Approach to § 101*", on p. 21-22, when drawing conclusions from its preceding elaborations on *Mayo*,

"Analyzing patent-eligibility ... considers 'whether steps combined with a[n] natural law or abstract idea .... yield a claim that effectively covers the natural law or abstract idea itself".

without noticing that the underlined terms' meanings in this conclusion are totally undefined.

In particular, it is unclear how •) to combine – what does "combine" mean? – "steps", in *Mayo* being inventive concepts alike, with an "abstract idea (itself?)", in *Bilski/Mayo* standing for an incompletely described invention, just as •) to effectively cover – what does " effectively cover" mean? – an "abstract idea itself", whereby *Bilski/Mayo* did not use the term/notion "abstract idea itself", at all.

And it is totally unclear how this thinking should ever help to achieve the exclusion of the § 112 test problems I. and II. explained by the SUMMARY.

In spite of these open questions – due to this opinion's pre-scientific approach to clarifying the meanings of the two new *Mayo* terms[3),4)] "inventive concept" of a claimed invention and its claimed invention's "(non)-preemptiveness" alias being "(not) an abstract idea only" – its view logically implies a "NO" to the Supreme Court's question. But, this opinion provides no rational justification for this view, and its scholastic one is not helpful. Though, it enjoys superb congeniality of souls: The colour theory of Goethe encountered the same fate.

IV. ADULTERATING CIIs' SPL TESTS BY BRI

The preview on Section IV, provided by the end of Section II, promised demonstrating by practical/topical examples that also the BRI's free-style claim construction may have disastrous impacts on testing a CII for its satisfying SPL. Accordingly, this Section shows that the BRI guideline allegedly invites disregarding *Mayo* in CIIs' §§ 102/103 tests (which repeatedly state to be based on the BRI).

The 4 CIIs here at issue[4)] are disclosed by claims 68 resp. 91/104 of the '902 patent of SSBG/TELES (US 7,145,902) resp. by claim 35 of its '453 patent (US 6,954,453) and are subject to §§ 102/103 attacks by the USPTO[9)] and CISCO.

All claimed CIIs deal with Internet telephony, today called VoIP (VoIP = "voice over Internet Protocol", a term not existing at the '902/'453 priority date, 1995) and thereof with a technically then totally novel version, today broadly used.

The basic CIIs claimed by claims 68 and 35 solved the then frequently occurring problems that

---

9 The USPTO itself has problems with the BRI. In full knowledge of the CRU's and BPAI's BRI based opinions that the CII claims at issue – e.g. the just quoted ones – are not patentable, the responsible USPTO's Examiners issued recently 3 more CIP patents, i.e. based on the identical specification and the identical inventive concepts (just adding some mobility features disclosed by the '902/'453 specification a priori), in spite of these inventive concepts here being allegedly not sufficing for their patentability, due to the BRI. I.e.: The Examiners disregarded this BRI invitation.

the quality of a telephone call over a packet-switching network, e.g. the Internet, was unacceptably low due to signal propagation time between the telephone sets unexpectedly rising above the threshold for telephony, known to be 0.5 sec. The compound inventive concept common to anyone of these claimed CIIs – it is the logical conjunction of anyone of these CIIs' elementary inventive concepts required by Mayo, common to both CIIs – is to route the call on both telephone sites over a switch, which monitor the "communications connection" between the telephone sets and, as soon as this monitoring detects only a potential problem therein, to react by changing-over with this call by the calling switch onto a PSTN connection (PSTN = public switched telephone network) between them without interrupting the call. This avoids, in both CIIs, that the potential problem may occur – though it might not have occurred, anyway.

These are the claimed CIIs, from which *Mayo* requires to derive the meanings of the claim 68 / 34 claim terms[3),4)]. Let us focus on the claim 68, first.

The free-style claim term interpretation by the BRI enables volitionally broadening the meanings of these claim 68 claim terms[3),4)] as follows:

- While the claimed CII of claim 68 is by its specification made-up from **(1)** a telephone call (by the posc known to be a **communications connection**), and therein **(2)** a totally novel control signal (**"pro-active signal"**) triggering the telephone call's **(3)** change-over (being a **real-time change-over**) from **(4)** an **arbitrary** packet- to an **arbitrary** line-switching network,

- the BRI completely ignores all these highlighted meanings of these 4 claim 68 claim terms[3),4)] alias inventive concepts of its claimed invention, although the limitations of these meanings are necessary for the claimed invention's working and disclosed in detail by its specification.

I.e.: Instead of determining these 4 claim 68 claim terms' meanings[3),4)] as required by the claimed CII's working (disclosed in detail by its specification), the BRI determines these claim terms' meanings totally independently of the claimed claim 68 CII. I.e., the BRI refuses to accept that the "*Phillips* baseline" just as *Majo* clearly require to take the 4 claim 68 claim terms' meanings[3),4)] ("prelimited", as compared to the meanings the posc would determine for these terms by their BRI). I.e.: The BRI insinuates proceeding this way, even if these broad meanings •) are clearly excluded by the specification supporting the claim at issue, and •) modify the claimed CII such that it evidently does not resolve the problem specified by the specification, for the solution of which the CII has been invented.

By contrast, determining these 4 claim 68 claim terms' meanings within the framework of the '902 specification inclusively claim 68, as required by *Phillips/Mayo,* shows that **NONE** of these 4 inventive concepts ("**in-Cs**") of the CII claimed by claim 68 is disclosed by anyone of the 4 prior art documents.

(1) The in-C "**communications connection**".

The BRI allegedly encourages asserting that a "telephone call" (being a "communications connection") can be achieved by a "network con-

nection" alone, disregarding end-systems alias telephone sets. This is evidently false.

The BRI allegedly entitled asserting that a telephone call can be achieved by any connection enabling a data transfer. This is evidently false for connections controlled by a data retransmission based protocol (such as X.25 or TCP) as it untenably garbles the voice signal.

Thus, avoiding applying the BRI this strange way, one immediately recognizes: Anyone of the 4 prior art documents discloses only a network connection (i.e. is incapable of supporting a telephone set) and/or only an X.25 connection though the alleged packet-switching network (i.e. cannot achieve a telephone call).

(2) The in-C "p**roactive signal**".

"Proactive" means that the pro-activity occurs before a potential problem can actually occur.

A commonly known automotive example illustrates the meaning of the claim term "signal", explained by the '902 specification. The claimed CII does not wait to release this signal until a loss of quality in the telephone call has occurred and only <u>then</u> releases the change-over signal – just like an "inflatable life vest" is only inflated after hitting the water. Instead, this CII proactively releases this signal as soon as the monitoring of the communications connection detects an indication of a potential loss of quality thereof, just like an "air bag" deploys if a sensor detects a bump potentially indicating an accident.

Again, none of 4 prior art documents discloses a pro-active change-over signal. There any signal either responds to a problem having occurred

already (i.e. to a loss of quality actually encountered) or is released by the application only as it needs an increased bandwidth for an increased data volume to be transmitted – which does not occur in a telephone call, as it has a constant bandwidth requirement. Nevertheless the BRI is allegedly entitling asserting that the '902 signal is not pro-active, at all, but works just as one of the prior art signals – which evidently is false.

(3) The in-C "**1 call real-time change-over**".

The '902 change-over may be achieved by just dropping the packet-switched connection and affecting only a single call, i.e. not touching other ones. The BRI allegedly entitles asserting that both is immaterial and hence achieved by all prior art documents.

(4) The in-C "**any packet-/line-switched network**".

The claimed invention works on ANY packet-switching and line-switching network. But seemingly the BRI insinuated again, this is negligible and hence not at all worth considering.

Summarizing these 4 applications of the BRI guideline: If it would not insinuate such broadenings in determining the meanings of these 4 key claim terms were tolerable, they would have been recognized, as required by *Mayo* – as 4 inventive concepts of the claim 68 CII[3)-6)].

As none of them represents a natural phenomenon and all 4 are independent etc. [25], this CII's novelty and nonobviousness is indicated.

Finally, for showing the claim 68 CII is also nonpreemptive (= not an abstract idea only [5]), it would be necessary to define its other in-Cs, too

(skipped here, but done in [6,7,8]) for showing it passes the NAIO test, which then is a trivial FFOL exercise (see Section III).

The '453 claim 35 CII and the '902 claims 91/104[10)] CIIs are based on the same specification as the claim 68 CII. Thus, the above broadening by BRI of the meanings of its claim 68 terms yields the same adulterations of the SPL test of these 3 CIIs.

Note finally, that already a good deal of the IT and communications technology based inventions is vastly model based, as many of their in-Cs are completely intangible, i.e. are plainly intellectual/

---

[10] The additional inventive concept of these two '902 claims is a multiplexer. It handles the issue that several simultaneous such Internet calls between the same sites use several PSTN connections between their switches, thus causing unnecessary cost, as both switches may be equipped with a multiplexer each, which would put such calls – if they concurrently change-over to the PSTN – onto a single PSTN connection between them For the posc no commonly known multiplexers are used, as they must have additional and then novel though evident features. They namely must accommodate the change-over of an Internet telephone call, from the Internet connection between the switches onto a PSTN connection between them, at least as to •) address resolution (Which PSTN address belongs to an IP address, if e.g. the IP call establishment failed?) as well as to •) monitoring information (Is a potentially encountered network delay caused by the Internet or the PSTN?). The need of this support by the multiplexers is communicated to them by a respective command to the multiplexer on the caller's site when changing-over a call to it, as the specification discloses.

fictional – i.e. a good deal of the phenomena they rely on are totally intangible[11)].

---

[11] The '902 patent also is a nice example of its claimed invention being model based – a common feature of virtually all emerging technology inventions – and how its model is used for precisely describing it.

In the '902 case, as always in telecommunications, the underlying model is the ISO/OSI Reference Model and internationally standardized (while most specifications of model based claimed inventions use their own or some group's agreed on and hence non-standardized models). As is typical with reference systems alias paradigms alias models, they prescribe only commonly known features of the basic structures and functioning of the objects they support modeling, i.e. never describe all their technical details. Here the subject matter object modeled is a "communications connection". Some commonly known features of a communications connection are that it is an end-system-to-end-system connection alias association on this models Layer 7, whereby any association exists as soon as its associated entities are known. An existing communications connection/association is routed over many entities, routed over different networks, and its working may be monitored by such entities – as used by the '902 specification, enabled by the model underlying it.

And similarly is the specification of e.g. a DNA based invention supported by a "DNA model". Here no standard exists yet, i.e. this DNA model would be assumed by the inventor, without thinking about this assumption, to be commonly known and to represent some DNA features precisely known by the posc. These features then would be used in the specification of the DNA based invention.

CONCLUSIONS

Neglecting claim construction is the main source of the confusion as to the patent-eligibility of emerging technology inventions, also the massive deficiencies of classical claim construction. Although these were fixed by the Highest Courts' *Phillips*/*Mayo* decisions, uncertainties prevail – as shown in Section II by the USPTO's BRI guideline.

This is elaborated on in Sections III and IV by two topical computer-implemented inventions. In their cases claim construction has been completely ignored resp. applied by using the BRI, which caused total confusion – not only as to testing such a claimed invention under § 101 but also as to testing it under §§ 102/103. From these Sections also follows that these confusions would have been completely avoided by proceeding in their claim constructions as required by *Mayo*: This would namely have indicated in both cases that their claimed inventions are made up from inventive concepts, of which at least some (Section III) resp. all (Section IV) are patent-eligible and patentable. As to testing, whether a claimed invention satisfies SPL, the *Mayo* decision vastly comprises the *Phillips* decision (e.g. except § 112.6).

In total, there is a clear answer to the Supreme Court's question as to the patent-eligibility of a computer-implemented invention. This answer following from the here preceding elaborations and those in the recent SSBG Amicus Briefs to the Supreme Court [18,19] and tells:

- This enquiry must be started by construing, for the computer-implemented invention, the § 112 claim construction as required by *Mayo* – explained in full detail by [18,19,25].

  I.e.: Skipping construing the claim construction for the computer-implemented invention or construing it only the classical or even the BRI way, makes its answer definitively questionable.
- This "post-*Mayo*" alias "refined" claim construction and the so determined elementary inventive concepts of the claimed invention show, whether at least one of them is not representing a natural phenomenon. By *Mayo* this is a necessary condition for the claimed invention's patent-eligibility.
- "Abstract idea" inventive concepts passing § 112 don't exist.
- Therefore the claimed invention is by *Mayo* patent-eligible iff it is "not an abstract idea only".
- The claimed invention meets this then sufficient condition – i.e. is nonpreemptive [5] – iff it passes the NAIO [19] test.
- For any FFOL-CII it is easy to decide, whether it passes the NAIO test and hence is patent-eligible. All hitherto encountered CIIs are of FFOL.

This is the general reply to the above question, focused on computer-implemented inventions.

For another model based claimed invention – than a FFOL-CII – it may be difficult to apply the NAIO test for showing its inventive concepts prove its non-preemptivity. If the Supreme Court should invite Amicus Briefs as to such more general patent-eligibility questions – or those of other Substantive IP Laws, relaxed as compared to SPL [35,36], the resp. IPL-eligibility questions occurring there, too –

they would be explained in more detail by another SSBG Amicus Brief. Though, a similar strong answer as for special case of CIIs must not be expected.

At least one of these cases should be decided by the Highest Courts – clearly in the light of the *Mayo* decision. This would provide the needed guidance how to execute *Mayo's* claim construction for a computer-implemented claimed invention, i.e. how to proceed on this higher level of US patent precedents.

In total: By the *KSR/Bilski/Mayo/Myriad* decisions, the US Supreme Court has achieved a quantum leap in interpreting the Substantive Patent Law of 35 USC. With the *Mayo* decision, US SPL precedents has now been risen to a level enabling courts to achieve predictable and consistent decision-making, also for claimed inventions based on emerging technologies. This interpretation of SPL provides a guidepost also for the rest of the world.

By its *Markman* decision the Supreme Court has established that – via the unique CAFC and its constitutional guidance by the unique Federal Supreme Court – the US market may, as the only one of the world's large markets, rapidly introduce and guarantee the application of this predictable and consistent decision-making as to emerging technology inventions. This continues resp. stimulates and at the same time protects the innovativity of the US economy as to these for the society so important technologies to a degree as currently not achievable in other world markets[12)].

---

[12] Last week it turned out that the PRC is going to set up a similar unitary IP Court system as the US one.

Respectfully Submitted,

Chidambaram S. Iyer
Sughrue Mion, PLLC
2100 Pennsylvania Ave, NW
Suite 800
Washington, DC 20037
Tel: (202) 293-7060
c.iyer@sughrue.com
Attorney for
Sigram Schindler Beteiligungsgesellschaft mbH