

## BRI<sup>PTO</sup> by the USPTO or BRI<sup>MBA</sup> by the Supreme Court?

Sigram Schindler,  
TU Berlin & TELES Patent Rights International GmbH

*PROPOSAL FOR STUDY*<sup>1.a)</sup>: By its "*Mayo/Biosig/Alice, MBA*" framework the Supreme Court bans the BRI<sup>PTO</sup> from court rooms and requires using the BRI<sup>MBA</sup>

### EXPLANATION

The Supreme Court on 15.01.2016 accepted Cuozzo's Petition for Writ of Certiorari as to two questions, one of them implying the by this headline raised claim interpretation issue. But Cuozzo's PfC totally refrains from using the guidelines provided by the *MBA* framework for answering this question as to the lawfulness of the claim interpretation by the BRI<sup>PTO</sup> and of the claim construction based on it.

Hence, this explanation of the above "proposal for study" totally focuses on showing: By its *MBA* framework, the Supreme Court banned this BRI<sup>PTO</sup> from court rooms – implicitly, due to its social untenability, as well as explicitly by the *Biosig* decision within the *MBA* framework, due to its indefiniteness. Instead the *MBA* framework unconditionally requires using the BRI<sup>MBA</sup>, i.e. for CTCIs just as ETCIs<sup>1.b)</sup>.

This proposal's 2 substantive Sections are focused on ETCIs, as having caused the Supreme Court to launch its *MBA* framework. Accordingly, it shows – after an introductory Section I – that in testing an ETCI for its satisfying SPL, the BRI<sup>PTO</sup> is in legal decisions totally untenable, due to 2 independent reasons: Its inability to cope •with ETCIs (Section II) and •with the US Constitution (Section III).

### I. Introductory Remarks to the Supreme Court's *MBA* Framework

Consent exists between the Supreme Court and the USPTO that any legal decision about an ETCI requires knowing its meaning, i.e. clearly determining what exactly is the invention's claim of patent law protection, at all. This first step is called the ETCI's "claim **interpretation**".

Sharp disagreement exists – between the Supreme Court and the USPTO, but also within the CAFC – about how exactly to proceed in claim interpretation, as this procedure heavily impacts on the so determined meaning of this ETCI. This schism implies a potentially lethal damage for many patents.

For avoiding this disaster threatening all innovative US key economies, it is necessary and sufficient to apply more notional scrutiny in testing an ETCI for its meeting Substantive Patent Law ("SPL") requirements than hitherto practiced by courts or the USPTO – as the *MBA* framework clearly states.

By its *MBA* framework, the Supreme Court requires understanding that it refined the classical meanings of notions of SPL, of ETCIs, and of scrutiny in such tests<sup>1.c)</sup>. This implies reconsidering what is meant by "increased notional scrutiny the *MBA* framework requires" in claim interpretation, which here is called

- "refined claim interpretation", and recognizing that this increased notional scrutiny also requires a
- "refined claim **construction**", notionally to be clearly separated from this refined claim interpretation.

<sup>1</sup> .a This submission by the author has the broader USPTO context [244,251,259,260].

In BRI<sup>PTO</sup> just as in BRI<sup>MBA</sup>, the acronym "BRI" stands not only for interpretation but also for construing a claim.

.b CTCI/ETCI = classic/emerging technology claimed invention

.c all as approved by advanced System Design [2] and in particular by "Mathematical Artificial Intelligence, MAI"<sup>5.a)</sup>.

## II. The Properties of ETCIs Exclude Using the BRI<sup>PTO</sup> for Their Legal SPL Tests

Protecting ETCIs by SPL often fails if the BRI<sup>PTO</sup> is applied to them, as commonly known. The reason: The BRI<sup>PTO</sup>'s perception of SPL terms/notions<sup>2)</sup> is far too coarse. E.g.: The BRI<sup>PTO</sup> insinuates the terms 'claim construction' and 'claim interpretation' are synonyms – for ETCIs fatally wrong, as explained next.

Due to this experience, the Supreme Court by its *MBA* framework hence multiply required – in generic terms, as it is not responsible for 'bug fixing' of the patent community's terms/notions, e.g. terms/notions the BRI<sup>PTO</sup> and the claim construction is based on – that, in a so BRI<sup>PTO</sup> depending SPL-test, this ETCI's

- α) claim interpretation** must not fail to identify its complete set<sup>5.d)</sup> of "inventive concept(s)"<sup>3.a)3.b)</sup> and its **β) claim construction** must not fail to derive from them whether this ETCI satisfies SPL<sup>5.d)</sup>.

Yet: The BRI<sup>PTO</sup> is totally incapable to coop with two ETCI specific phenomena, as its paradigm<sup>4)</sup> ignores that any ETCI is **i) "model-based"**<sup>4)</sup>, and its embodiment often is a **ii) "software system"**.

- **Deficiency i)** causes troubles in drafting and/or interpreting claims and their patents' specifications dealing with ETCIs. With all likelihood these leave some of their ETCI-elements or their properties undefined or indefinite, if one ignores that any ETCI **+) is based on "metaphysical models"**, and **+) these often provide only limited means for precisely determining the meanings of this ETCI's inCs<sup>3.c)</sup>.**
- **Deficiency ii)** causes such troubles, as a patent on an "in-software-to-implement" ETCI protects an 'abstract machine' – so since 40+ years the common IT term – implementable by many technically from each other so dramatically differing software-systems that the question arises, whether this ETCI is more than an "abstract idea" of an invention. In this case it may "preempt", e.g. a creative implementation ETCI\* (for the pposc nonobvious and by ETCI's specification non-disclosed), and socially unacceptably refuse granting ETCI\*'s inventor a patent for it, but includes its ETCI\* into ETCI.

<sup>2</sup> Discussing innovations/ETCIs requires fundamental terminology: A 'term' is an arbitrary 'identifier' alias 'name' alias 'acronym'. A pair <term, its 'meaning'> is called 'notion', denoted by its name. A notion's meaning, associated to its term/name, is called its 'semantics' – if refined for an application's need its 'pragmatics'. Making/Creating/Defining meaning/semantics/pragmatics is called 'semiotics'. The *MBA* framework performs 'SPL semiotics' for ETCIs.

<sup>3.a</sup> Any of the *KSR&MBA* framework Supreme Court decisions requires using the notion of "inventive concept, inC" for describing alias specifying alias modeling, for an ETCI, its meaning – whereby any inC describes (=specifies=models) an inventive aspect of this meaning, and the logical sum of all inCs of this ETCI describes this ETCI's total inventivity (alias ETCI's meaning), both as disclosed by ETCI's specification for the "person of pertinent ordinary skill and creativity, pposc".

By BRI<sup>PTO</sup>'s definition, the latter **FUNDAMENTAL CHECK** is logically impossible, as the BRI<sup>PTO</sup> therefore for an ETCI ●) assumes it is described by its "limitations" stated by its claim's wording, i.e. by limitations of something there not defined [259], i.e. ●) ignores its inCs alias aspects of its total inventivity not explicitly addressed by its claim's wording.

Thus – while the *MBA* framework decisions are eligibility/definiteness decisions – they also clearly and unmistakably state – the Supreme Court's claim description and interpretation requirements [256,259,260].

.b If an ETCI's inC is, by its claim interpretation, not recognized<sup>3.a)</sup> then it is impossible to determine, whether it is causing ETCI's potential exemption from patent-eligibility – this inC then is called "patent-eligibility exempted" – or its patent-eligibility, as being an "inventive **Alice concept, in<sup>A</sup>C**", representing (part of) ETCI's application A of its TT0 [259,260].

.c Overcoming these deficiencies inevitably requires semiotically<sup>2)</sup> refining the classical/pre-*MBA* framework SPL semantics /pragmatics to post-*MBA* framework SPL semantics/pragmatics, as by the *MBA* framework achieved<sup>4)</sup> [166].

<sup>4</sup> The notion of 'model', in philosophy called 'paradigm', is needed in any area of systematic thinking for precisely defining – on top of it – this thinking's semiotics<sup>2)</sup>. This fundamental notion's technical area specific names are in Linguistics "interpretation basis", in Mathematics "generative basis", in Physics "coordinate system", in System Design Technique "module scheme", in SPL "<ETCI-elements>", its notional flavour slightly changing over all these exemplarily quoted areas.

Thereby any specific ETCI / module / physical system / mathematical theorem / sentence is defined on top of its model by means of: properties (=inCs<sup>3)</sup>) of its <ETCI-elements> / functionalities of its <module scheme> / physical laws over its coordinate system / mathematical axioms over its generative set / language grammar rules over its interpretation basis.

Any exact science – even Mathematics – is in this sense models based and has over time figured out, primarily in the 20<sup>th</sup> century, how to use models safely. For SPL this happens here – supported by MAI-limited natural language<sup>1.b)5.a)</sup>.

Thus, BRI<sup>PTO</sup>'s incapability to verify the correctness of an ETCI's claim interpretation – by checking that the logical sum of its inCs describes ETCI's total inventivity<sup>3.a)3.b)</sup>, worsened by ETCI's deficiency i) and potentially ii) – often leads to erroneously assume it would not satisfy SPL, while using the BRI<sup>MBA</sup> (delivering ETCI's refined claim interpretation, meticulously verifying its correctness determines this ETCI to satisfy SPL. This renders using the BRI<sup>PTO</sup> in ETCIs' SPL tests totally untenable. I.e.: Using the BRI<sup>MBA</sup>, instead of the BRI<sup>PTO</sup>, excludes all such problems as it enforces the notional completeness and preciseness of the refined claim interpretation & construction (see FIGs1/2 and [259]) as briefly explained next.

This increased scrutiny of the BRI<sup>MBA</sup> substantially increases the complexity of performing, for an ETCI, its refined claim interpretation & construction to a degree that they practically are determinable +)only iteratively and +)only by using an extremely simple and precise flavor of a natural language, here called MAI-English<sup>5.a)</sup>, for describing its ETCI-elements and their inCs, more precisely: Its combinations of its inCs in MAI representation<sup>5.a)</sup>, its "COMs"<sup>5.c)</sup>. In general, all COMs of ETCI must be checked for their passing ETCI's refined claim construction<sup>5.e)</sup>.

The all overarching importance of the FSTP-Test is evident from FIGs1/2 and their Legends1/2. Note that executing an ETCI's refined claim interpretation, its refined claim construction, and its cross-checks between both would be performed fully computer-guided – thus amazingly increasing clarity, quality, and efficiency of drafting and examining patents [9].

Finally, there is no reason for not applying the MBA framework – i.e. for not using the FSTP-Test – for testing also CTCIs<sup>1.b)</sup> for their satisfying SPL.

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<sup>5.a</sup> The simplicity of MAI-English – or "natural MAI", or just "MAI" – is demonstrated by construing the refined claim interpretations & constructions for the ETCIs of the CAFC's *DDR/Myriad/Cuozzo* and the ET DC's *Motio* cases in [244,256,260]. The SPL test of an ETCI in MAI representation – by the FSTP-Test<sup>5.e)</sup> – is shown by FIG2.

<sup>5.b</sup> Using MAI does not exclude using natural MAI language reasoning, as practiced here. But it tells that this reasoning is representable in mathematical notation (see FIG2). This is all that the use of MAI communicates. But this "correctness proving attitude" known from Software Engineering is something that nobody hitherto has claimed to work in ETCI's testing for SPL satisfaction. For the complete mathematical axiomatization of SPL needed to this end see [9].

The here used (unusual) term/notion "Mathematical Artificial Intelligence, MAI" shall convey this unusual attitude.

<sup>5.c</sup> The Supreme Court's *Alice* decision introduced the notion of "**combinations**" of inCs in ETCIs' SPL tests, as test1 in FIG2 visualizes. This notion implies structuring an ETCI's representation such that it is facilitated by using this notion.

This structuring seamlessly complements the notion of a patent specification. Usually, such a specification describes its ETCI on two 'layers' of notional resolution, on an abstract level outlining the principal working of the ETCI by means of A-inCs, and on an elementary level describing by means of E-inCs ETCI details. Thus, A-inCs are compounds of E-inCs/E-Cs, i.e. an A-inC is always disaggregatable into a legally & logically equivalent conjunction of E-inCs/E-Cs<sup>5.e)</sup>. I.e.: This one or several conjunction(s)/compound(s)/A-inC(s) of ETCI's E-inC(s) /E-C(s) in an ETCI is/are *Alice's* **combination(s)**<sup>5.d)</sup>.

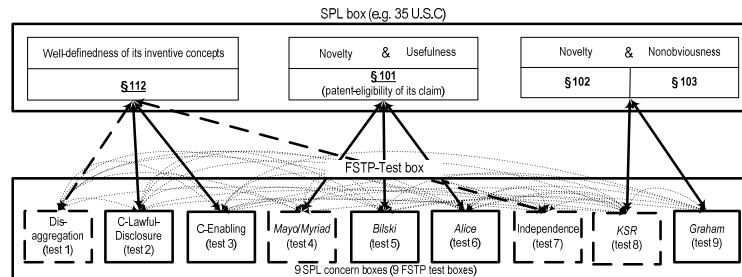
<sup>5.d</sup> Any COM must be determined by trial and error.

For simplicity is assumed: The ETCI under SPL test – by the FSTP-Test<sup>5.e)</sup> – has only a single tentative COM/C/ 'technical teaching TT0'/claim interpretation'. This trivially warrants, C's E-inCs are independent.

<sup>5.e</sup> The FSTP-Test is based on ETCI's inventive concepts<sup>3.b)</sup>, showing what combinations of inCs, COM, exist at all for these cross-checks between refined claim interpretation and refined claim construction (see also the Legend to FIG2). This complexity implies: Testing an ETCI for satisfying SPL must indispensably start by its refined claim interpretation. I.e.: Reducing it to the classic claim interpretation or skipping it totally, as also often done, means just practicing irrationality.

I.o.w.: Although ETCI's refined claim interpretation and its refined claim construction are principally notionally mutually independent, any former's COM must be checked iteratively, whether it<sup>5.b)</sup> meets SPL's definiteness/.../patent-eligibility/.../patentability requirements, i.e. passes the SPL/FSTP-Test – or else this COM must be discarded.

FIG1 shows the ETCl<sup>3)</sup> to SPL relation defined by the Supreme Court's *MBA* framework, key for designing the FSTP-Test such that it implements this relation. Hence, its holding on an ETCl's properties, i.e. ETCl's passing the FSTP-Test, is necessary and sufficient for this ETCl to satisfy SPL. Bold solid double-headed arrows show, for an ETCl, what properties of its ETCl-elements are regarded by the BRIP<sup>TO</sup>. Bold dashed and fine double-headed arrows show, what additionally must be and is regarded by the BRIM<sup>B</sup>A alias FSTP-Test.



**FIG1: The 9 Necessary^Sufficient testo's of an ETCl for Satisfying SPL as Interpreted by the Supreme Court**

**Legend1:** The SPL box shows the 4 Sections of 35 USC SPL, being the abstract legal implementation of social concerns as to granting by SPL a temporary monopoly on an ETCl, which comprise and hence are refined to 9 elementary such concerns, separate from each other. Any elementary concern is an elementary SPL requirement statement that is to be met by ETCl's properties for its satisfying SPL. Accordingly, the FSTP-Test box shows 9 testo's, checking ETCl for its meeting these concerns and hence its socially deserving patent-eligibility and patentability, as determined by the Legislator and interpreted by the Supreme Court. Note: The 9 testo's totally intermesh all 9 ETCl properties and all 9 SPL concerns.

The FSTP-Test stepwise prompts its user for inputting the information about a given ETCl = <invention/TT0,application/A>:

- $\forall^A \text{ETCl-elements } X_{0n}, 1 \leq n \leq N \wedge \forall^A \text{-crC}_{0n}, 1 \leq n \leq N \wedge \forall^E \text{-crC}_{0nk}, 1 \leq nk \leq K^n$ , with  $1 \leq n \leq N \wedge K::= \sum_{1 \leq nk \leq K^n}$ ;
- if  $|RS|=|>0$ :  $\forall^T \text{Ti-elements } X_{in} \wedge \forall^A \text{-crC}_{in}, 1 \leq i \leq I \wedge 1 \leq n \leq N \wedge \forall^E \text{-crC}_{ink}, 1 \leq nk \leq K^n$ ;
- $\forall$  justifications (provided by the resp. ET pposc, where necessary by a resp. ET expert);

1)	(a) $A\text{-COMA}(\text{ATTO}) ::=^A \text{AC} ::= \{(X_{0n}, A\text{-crC}_{0n})   \forall^{1 \leq n \leq N}\}$ , the N A-crC <sub>0n</sub> describing the whole subject matter and E-COM(ATTO) ::= $^A \text{EC} = C ::= \{E\text{-crC}_{0kn}   1 \leq n \leq N \wedge 1 \leq nk \leq K^n : A\text{-crC}_{0n} = \bigwedge_{1 \leq kn \leq K^n} E\text{-crC}_{0nk}\}$ ;	
	(b) $\text{justof}^{\forall^{1 \leq n \leq N}}$ : A-crC <sub>0n</sub> is <b>definite over posc</b> $\wedge$ AC vaguely( $\downarrow$ )/exactly( $\uparrow$ ) describes <TT0,A>;	
	(c) $\text{justof}^{\forall^A \text{CUC}}$ : $A\text{-crC}_{0n} = \bigwedge_{1 \leq kn \leq K^n} E\text{-crC}_{0nk}$ (leaving aside the non-creative concepts);	
	(d) $\text{justof}^{\forall^A \text{CUC}}$ : <b>Biosig-test</b>	<b>passed:</b> $\forall E\text{-crC}_{0nk} \wedge A\text{-crC}_{0n} \nabla \text{posc}$ ;
2)	$\text{justof}^{\forall^A \text{CUC}}$ : <b>ACU^AEC-Lawful-Disclosure-test</b>	<b>passed:</b> $\forall e^A \text{CU}^A \text{EC}$ are lawfully disclosed;
3)	$\text{justof}^{\forall^A \text{CUC}}$ : <b>AC -Enabling-test</b>	<b>passed:</b> $\forall e^A \text{AC}$ implementability is lawfully disclosed;
4)	$\text{justof}^{\forall^A \text{CUC}}$ : <b>Mayo/Myriad-test</b>	<b>passed:</b> $\forall$ natural law E-crC <sub>0kn</sub> 's are identified;
5)	$\text{justof}^{\forall^A \text{CUC}}$ : <b>Bilski-test</b>	<b>passed:</b> <TT0,φ> is unlimited preemptive (if applicable);
6)	$\text{justof}^{\forall^A \text{CUC}}$ : <b>Alice-test</b>	<b>passed:</b> <TT0,A> is patent-eligible (if applicable);
7)	$\text{justof}^{\forall^C}$ : <b>AEC-Independence-test</b>	<b>passed:</b> $\forall e^A \text{EC}$ are independent (if applicable);
8)	$\text{justof}^{\forall^C}$ : <b>KSR-test</b>	<b>passed:</b> $\forall E\text{-crC}_{ink} \nabla E\text{-crC}_{0nk}$ (if applicable);
9)	<b>Graham-test</b>	<b>passed:</b> ETCl is patentable, iff $AQ^{plcs} > 1$ over $^A \text{RS}$ .

**FIG2: The FSTP-Test – Checking an ETCl for its Meeting all 9 Requirements Stated by the MBA Framework**

**Legend2:** The horizontal dashed line separates – for an ETCl alias pair of <an invention/TT0, its application/A> – its refined claim interpretation (above it) from its refined claim construction (below it). The latter potentially skips test4-test8 (in particular below the horizontal double line iff RS=φ). This interplay of an ETCl's refined claim interpretation with its refined claim construction has nowhere ever been shown before. For more information about the FSTP-Test see [236,239,232,244,256,137].

Note: The FSTP-Test of an ETCl does not replace the user's/pposc's input, indicated by the "justof" acronyms, but it takes any such input as axiom, i.e. does not question it (much of which being replaceable/controllable by today still unavailable SPL pragmatics specific derivation means from preceding input). The FSTP-Test by these justof's just disaggregates ETCl's test for satisfying SPL into small such SPL pragmatics items, the – potentially controversial – clarification of which (to be achieved as of *Markman/Teva* [172]) is necessary and sufficient for arriving at a legally absolutely unquestionable test result.

### III. The Supreme Court Explicitly Bans the BRI<sup>PTO</sup> by its *Biosig* Decision

The *Biosig* decision nowhere refers to the *Mayo* decision. Although both decisions are unanimous, this seems – at the first glance – as if *Biosig* held some distance to *Mayo*. Yet, this impression is wrong, as the contrary applies. Namely: *Mayo* showed that not using inCs for modeling an ETCI's meaning (i.e. in its claim interpretation) implies oversimplifying the determination of its “patent-eligibility”<sup>3.b</sup>, why it provided the adequate meaning of this term, thereby implicitly excluding using the BRI<sup>PTO</sup> (see Section II).

Thereafter, the key message that the Supreme Court conveyed by its *Biosig* decision explicitly states that also the notion of “definiteness” is tangled if based on the BRI<sup>PTO</sup>, provides the logically only adequate meaning of also this term, and thus clarifies that any application of the BRI<sup>PTO</sup> in this legal context – as it evidently also happens in the CAFC's “irresolvable ambiguity test” – contradicts the US Constitution, by explaining:

*“It cannot be sufficient that a court can ascribe **some** meaning to a patent's claims; the definiteness inquiry trains on the understanding of a skilled artisan at the time of the patent application, not that of a court viewing matters post hoc. To tolerate imprecision ... would diminish the definiteness requirement's public-notice function and foster the innovation-discouraging “zone of uncertainty,” United Carbon, 317 U. S., at 236, against which this Court has warned”.*

But, by using the BRI<sup>PTO</sup> ‘... a court [does by definition of the BRI<sup>PTO</sup>] ascribe **some** meaning to a patent's claims’. The CAFC's [56] and the more USPTO's notion of “broadest” in the BRI<sup>PTO</sup> is namely based on the unlimited use of the “v” quantor, i.e. its meaning is not definable [55]. Hence, *Biosig* seamlessly complements *Mayo*. By this quotation from its *Biosig* decision, the Supreme Court explicitly banned the today practiced use of the BRI<sup>PTO</sup> in testing an ETCI for satisfying SPL.

Three final remarks show that parts of the patent community dislike the preceding truths:

- The above quotation from the Supreme Court's *Biosig* opinion counters the often heard alleged argument that ‘limitations from a claim's specification must not be imported into the meaning of the claim's wording’. This rumor is sheer nonsense, as it is not realizable for all ETCIs with more than e.g. half a dozen elementary inCs of sophisticated meanings disclosed by its patent specification. If the definitions of these meanings were imported into the claim's wording, it would comprise several pages and be completely incomprehensible – and hence most patents proceed otherwise.
- *Biosig* clearly and precisely clarified the meaning of the term<sup>2</sup> “definiteness” in an ETCI's SPL satisfaction test, though only declaratively. Translating this declarative “definiteness” notion by *Biosig* into an equivalent and equally rigorous operative test inevitably requires ETCI's refined claim interpretation & refined claim construction, as already required by *Mayo* and explained in detail by Section II.
- *Biosig*'s elaborations on the limits of preciseness required in an ETCI's specification – addressing deficiencies of the natural language encountered thereby (when used unaware of its pitfalls) – in no way devaluate its above quotation. Recent insinuations, e.g. by a CAFC decision, that these language elaborations were key to the Supreme Court's *Biosig* decision in the sense that they render its above quoted statement meaningless, are just grossly misleading.



## The FSTP-Project's Reference List

FSTP = Facts Screening/Transforming/Presenting (Version of 04.02.2016<sup>1</sup>)

Most of the author's below papers are written in preparation of [182] – i.e. are not intended to be self-explaining independently of their predecessors.

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

[2] AIT: "Advanced Information Tech." alias "Artificial Intelligence Technology" denotes cutting edge IT areas, e.g. Knowledge Representation/Description Logic/Natural Language (NL)/Semantics/Semiotics/System Design.

[3] MAL: "Mathematical Artificial Intelligence", the resilient fundament of AIT.

[4] R. Brachmann, H. Levesque: "Knowledge Represent. & Reasoning", Elsevier, 2004.

[5] F. Baader, D. Calvanese, D. McGuinness, D. Nardi, P. Patel-Schneider: "The Description Logic Handbook", Camb. UP, 2010.

[6] S. Schindler: "Math. Model. Substant. Patent Law (SPL) Top-Down vs. Bottom-Up", Yokohama, JURISIN 2013<sup>1</sup>.

[7] S. Schindler: "FSTP: pat. appl. 'THE FSTP EXPERT SYSTEM' 2012<sup>2</sup>".

[8] S. Schindler: "DS: pat. appl. 'AN INNOVATION EXPERT SYSTEM, IES, & ITS PTR-DS', 2013<sup>3</sup>".

[9] S. Schindler, J. Schulze: "Technical Report #1 on 020 PTR", 2014.

[10] S. Schindler: "Patent Business – Before Shake-up", 2015<sup>4</sup>.

[11] SSBG's AB to CAFc in LBC, 2013<sup>5</sup>.

[12] S. Schindler, "inC: pat. appl. 'inC ENABLED SEMI-AUTO. TESTS OF PATENTS', 2013<sup>6</sup>".

[13] "USPTOMPEP - 2111 Claim Interpretation: Broadest Reason. Interpretation".

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[18] USPTO: "Intellectual Property and the US Economy: INDUSTR. IN FOCUS", 2012<sup>11</sup>.

[19] K. O'Malley: Keynote Address, IPO, 2013<sup>12</sup>.

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[21] S. Schindler: "The IES and inC Enabled SPL Tests", Munich, 2013<sup>14</sup>.

[22] S. Schindler: "Two Fund. Theorems of Math. Innovation Science", Hong Kong, ECOM-2013<sup>15</sup>.

[23] S. Schindler, A. Paschke, S. Ramakrishna: "Form. Leg. Reas. that an Inven. Satis. SPL", Bologna, JURIX-2013<sup>16</sup>.

[24] USSC: SSBG's AB in Bile, 08.02.2014<sup>17</sup>.

[25] T. Bench-Capon, F. Coenen: "Info. and Legal Knowledge Based Systems", AI&Law, 1992<sup>18</sup>.

[26] K. Ashley, V. Walker: "From 'Is to Arg. Refr. for Legal Cases", Bologna, JURIX-2013<sup>19</sup>.

[27] S. Schindler: "KR Based Inno. E. Sys. (IES) for US SPL Preced. Phuket, ICIM-2014<sup>20</sup>".

[28] S. Schindler: "Status Report about the FSTP Prototype", Hyderabad, GIPC-2014.

[29] S. Schindler: "Status of the FSTP Prototype", Moscow, LESI, 2014.

[30] S. Schindler, IPR-MEMO: "SCL, and SPL – STL Tests seen as SCL Tests seen as SPL Tests", in prep.

[31] S. Schindler: "Boon and Bane of Invention Concepts and Refined Claim Construction in the Supreme Court's New Patent Precedents", Berkeley, IPSC, 08.08.2014<sup>21</sup>.

[32] D. Bey, C. Cotropia: "The Unreasonableness of the BRI Standard", AIPLA, 2009<sup>22</sup>.

[33] CAFc: Transcript of the Hearing in TELES vs. CISCO/USPTO, 08.01.2014<sup>23</sup>.

[34] CAFc: Transcript of the en banc Hearing in IES vs. ALICE, 08.02.2015<sup>24</sup>.

[35] SSBG's Brief to the CAFc in case 453<sup>25</sup>.

[36] SSBG's Brief to the CAFc in case 902<sup>26</sup>.

[37] SSBG's Amicus Brief to the CAFc in case CLS, 06.12.2012<sup>27</sup>.

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