

No. 15-446

IN THE
Supreme Court of the United States

Cuozzo Speed Technologies, LLC,
Petitioner

v.

Michelle K. Lee, Under Secretary of Commerce for
Intellectual Property and Director, Patent and
Trademark Office

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**

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Washington, DC
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November 5, 2015

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Excerpt from the FSTP-Project's Reference List

FSTP = Facts Screening/Transforming/Presenting (Version_of_04.11.2015)
Most of the author's below paper's are written in preparation of [182].*

- [6] S. Schindler, "**FSTP**" **pat. appl.**: "THE FSTP EXPERT SYSTEM", 2012*).
- [7] S. Schindler, "**DS**" **pat. appl.**: "AN INNOVATION EXPERT SYSTEM, IES, & ITS PTRDS", 2013*).
- [9] S. Schindler: "Patent Business – Before Shake-up", 2015*).
- [14] "USPTO/MPEP: "2111 Claim Interpretation; Broadest Reason. Interpretation".
- [91] B. Wegner, S. Schindler: "A Math. KR Model for Ref. Cl. Cons. II", subm. for publication.
- [171] S. Schindler: "Semiotic Impacts of the Supreme Court's Mayo/Biosig/Alice Decisions on Legally Analyzing ETCIs"*).

[182] S. Schindler: “Patent/Innovation Technology and Science”, Textbook, in prep.

FIG. 1



[201] Panel: “Patent Prosecution Session”, AIPLA, LA, 31.04.2015.

FIG. 2



[237] S. Schindler: “A Solution of the Patent-Eligibility/Preemptivity Problem – Rooted in Kant”, in prep.

FIG. 3

[242] Panel: “The Evolving Landscape at PTAB Proceedings”, AIPLA, DC, 22.10.2015

[243] M. Lee: Publ. Interview at Opening Plenary Session, AIPLA, DC, 21.10.2015.

*) available at 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 shareholder of TELES AG, founded 1983 by Sigram Schindler.

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, SSBG has a vested interest in supporting the US patent system in its on-going development in adjusting itself to the needs of the emerging technology inventions. This Court indicated by its groundbreaking *KSR/Bilski/Mayo/Myriad/Biosig/Alice/Teva* decisions what these needs are and how it requires meeting them by precedents as to 35 USC §§ 101/102/103/112. This brief supports this development by showing that these requirements provide a resilient basis for the growth of the US economies based on emerging technologies^{a)}.

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

- a)** 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. Letters from the parties consenting to the filing of this brief are on file with the Clerk.

SUMMARY OF THE ARGUMENT

This Court accepted from Cuozzo Speed Technologies (“**Cuozzo**”) two problems for commenting on by Amicus Briefs: ‘*Whether the CAFC erred in holding*

- 1) *that in IPR proceedings, the Board may construe claims in an issued patent according to their BRI rather than their plain and ordinary meaning, and*
- 2) *that even if the Board exceeds its statutory authority in instituting an IPR proceeding, the Board’s decision whether to institute an IPR proceeding is judicially unreviewable.’*

Both questions are heavily impacting on the development of the whole US economy based on innovation business – just as the patent-eligibility question raised by “Emerging Technology Claimed Inventions, **ETCIs**”.

This Court vastly settled such issues by its related line of decisions between *Markman* and *Teva*, especially in *Mayo/Biosig/Alice* – for short: its “**MBA framework**”.

Cuozzo’s Petition focuses on the urgency of deciding both questions, on CAFC’s and PTAB’s positions in both questions, and on criticizing both their decisions in its case. But, it totally refrains from using the guidelines provided by this *MBA* framework for answering question 1) as to the “**BRI^{PTO}**”. Hence, this brief^{1.a)} totally focuses on showing: By its *MBA* framework, this Court has clearly banned this **BRI^{PTO}** from court rooms – just as *AIT*^{1.b)} sees it, due to **BRI^{PTO}**’s evident irrationality.

Stretching question 2), this brief notes, only here: IPRs higher analogy to this Court’s recent *Teva* decision would analogously facilitate the CAFC’s business.

THE ARGUMENT

**I. THE *MBA* FRAMEWORK NOTIONALLY
CLEARLY SEPARATES, FOR AN ETCI, ITS
● REFINED CLAIM INTERPRETATION FROM
● ITS REFINED CLAIM CONSTRUCTION**

I.1 Introductory Remarks to this *MBA* Framework

This Court's *MBA* framework tackled a problem long time haunting the US National Patent System: Its schism concerning the notion of "claim **interpretation**".

Consent exists that any discussion about a claim – more precisely: about a claimed invention – requires knowing the meaning of this claimed invention, i.e. getting familiar with what exactly this invention is, at all. This first step is called "claim **interpretation**".

Sharp disagreement exists – within the CAFC, but also between the PTO and many courts – about what it means to determine the meaning of a claimed invention, i.e. how exactly to proceed in executing this first step. This schism implies a potentially lethal damage, for any US economy based on innovation business.

Hence, this Court's reaction by its *MBA* framework on this disaster threatening US key economies: For avoiding it, it is necessary and sufficient to apply more notional scrutiny in Substantive Patent Law ("SPL") precedents about ETCIs than hitherto practiced by courts or the PTO – as the *MBA* framework clearly outlines.

This *MBA* framework based refinement of the classical meanings of SPL, of claimed inventions, and of notional

scrutiny is explicated by the following tutorial elaborations^{1.a)} of this brief. They not only explain

- what is meant by the ‘increased notional scrutiny the *MBA* framework requires’ in claim interpretation – by the so-called ‘refined claim interpretation’ – but
- also that this increased notional scrutiny has a sibling notion: Namely the “refined claim construction”.

These tutorial elaborations on the impact of the *MBA* framework on the above question 1) will make evident, why and that the notional sibling pair of ‘refined claim interpretation’ & ‘refined claim construction’ ideally complement each other by greatly facilitating testing, whether an ETCI satisfies SPL. This complementation namely shows and proves, what inevitably the only logically and legally correct answer is to the above question 1) – consistent to the *MBA* framework.

^{1.a} This brief is ‘tutorial’ for a person familiar with the above quoted line of Supreme Court decisions, comprising especially its *MBA* framework. And also then, it should not be misunderstood as meaning ‘trivial’. It indeed is a high-level and in-depth tutorial, avoiding oversimplifications – often met in claim interpretation & construction – for recognizing what question 1) shows, seen in the light of the *MBA* framework. Its key notion of “inventive concept” is thereby not yet clarified by this ARGUMENT³⁾⁵⁾ [237].

Yet, it is worthwhile to get acquainted with this degree of scrutiny this Court asks for by its *MBA* framework: It namely provides, to patent experts, an indispensable and resilient fundament for professional top quality elaborations on SPL issues inevitable brought up by ETCIs – especially patent-eligibility and definiteness issues.

.b “Advanced Information Technology” alias “Artificial Intelligence Technology”

I.2 The SPL Untenability of the BRI^{PTO}

Protecting ETCIs by SPL often fails if the PTO’s classical claim interpretation – its “BRI^{PTO}” (see Section II) – is applied to them, as the recent years’ clashes within the CAFC showed, today in *Cuozzo*, and PTO’s difficulties with e.g. its BRI and IPRs [201,242,243].

The reason being: The BRI^{PTO}’s terms/notions² show its too coarse perception of SPL problems. Today it deems any patent expert using the BRI^{PTO}, the terms ‘claim construction’ and ‘claim interpretation’ were synonyms – what definitively is fatally wrong. This is evidenced throughout this tutorial by ETCIs, as these expose notional key differences – e.g. between ‘claim interpretation’ and ‘claim construction’ – much clearer than CTCIs (= “classical technology claimed inventions”), as the Legend to FIG 1 explains.

Hence, this Court by its *MBA* framework multiply indicated – though only generically, as it is not responsible for actual ‘bug fixing’ – that, for an ETCI, its

- classical claim interpretation may fail to identify all its one or several “inventive concept(s)”^{3.b}, and its
- classical claim construction may fail to derive from them whether this ETCI satisfies SPL.

² 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.

This Court's *MBA* framework thus hinted at and required – while implicitly only, nevertheless unquestionably – a “refined claim interpretation & construction” for ETCIs^{3.a)}, which avoids these two problems^{3.b).c)}.

This is elaborated on next, after first identifying two ETCI specific phenomena, with which to coop the classic claim interpretation, its BRIP^{TO}, is totally incapable.

The BRIP^{TO}'s two fundamental deficiencies are: It ignores: any ETCI is **i) “model-based”⁴⁾**, and its embodiment/implementation often is a **ii) “software system”**. Any such deficiency, not to speak of their conjunction, makes an ETCI's BRIP^{TO} intellectually untenable as it is very incomplete (see FIG 1) and hence unclear [243].

Overcoming these deficiencies inevitably requires semiotically²⁾ refining the classical SPL semantics/pragmatics, as by the *MBA* framework achieved [171].

- **Deficiency i)** causes troubles in drafting and/or interpreting claims and their patents' specifications, as any ETCI with all likelihood there leaves properties undefined and/or the allegedly defined ones as

³ **a** While the *MBA* decisions are eligibility/definiteness decisions, their opinions vastly state their claim interpretation requirements.

b This Court additionally requires to use the notion of “inventive concept”, here abbr. by “inC”, for telling an ETCI's meaning²⁾, as disclosed by its specification. Any inC models an indispensable and legal increment of ETCI's inventivity. Its vague classical substitute is “limitation”.

Of this key notion of ‘inC’ of the *MBA* framework, only ftns⁴⁾⁵⁾ outline its ‘compound’/‘elementary’ qualities.

c This problem's solution is of AIT^{1.b)}, not of legal kind.

wrong, if its description/interpretation ignores that *) there are “metaphysical models” underlying this ETCI, and that *) these models mostly have only limited areas for precisely determining meanings of the inCs of this ETCI. Any exact science – including Mathematics – is in this sense models based and has over time figured out, initially by Analytic Philosophy, how to limit its models’ use⁴⁾⁵⁾.

- **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” a very creative implementation ETCI* (for the post nonobvious and by ETCI’s specification non-disclosed) and thus socially unacceptably deprive ETCI*’s inventor of a patent for it.

Repeating this Court’s above two requirement statements in more detail, its *MBA* framework requires that this “refined claim interpretation & construction” must

⁴ The notion of ‘model’, in philosophy called ‘paradigm’, is needed in any area of systematic thinking, always for precisely defining on top of it this thinking’s semiotics²⁾. This fundamental notion’s other names are in Linguistics “interpretation basis”, in Mathematics/Physics “coordinate system”, in System Design Technique “module” – in ETCI thinking “SPL”.

Thereby holds: Any specific ETCI/module/phys. system/math. theorem/sentence – inevitably model based – rests on inCs^{3.b)}/module elements/phys. laws/math. axioms/language syntax rules, in turn being defined on top of this model. [9] precisely defines the *MBA* semiotics on top of the SPL model.

●) eventually enable the PTO and the courts to grant to an ETCI (by its refined claim interpretation&construction) a robust patent – and hence, ●) prior to that enable both authorities to recognize these two potential problems of an ETCI by its refined claim interpretation, for nevertheless assessing ETCI’s enablement. Moreover, this Court stated by its *MBA* framework clear requirements, as to ●) what notions are to be used by the judicative in any communication about this ETCI’s refined claim interpretation & construction.

From the two first bullets follows that – for excluding the errors i)/ii) ^{3.c)} – this refined claim interpretation & construction inevitably requires a substantial increase of the notional completeness and preciseness, as FIGs 1/2 explain. This increased scrutiny refers to the determination of ETCI’s meaning by construing for it its refined claim interpretation just as to the determination of ETCI’s satisfying SPL by construing for this refined claim interpretation its refined claim construction.

This, in turn, increases the complexity of ETCI’s refined claim interpretation&construction to a degree that practically it is executable only iteratively: In any of its combinations of inCs, its “COMs”⁵⁾, by^{3.c)} ‘testo iteration step specific’ cross-checking, i.e. feeding this COM back into checking that it does pass its refined claim construction.

Although ETCI’s refined claim interpretation and its refined claim construction are notionally mutually independent, any former’s COM must be checked iteratively, whether it^{5.b)} meets SPL’s definiteness/.../patent-eligibility/.../patentability requirements, i.e. passes the SPL/FSTP-Test – or else this COM must be discarded^{3.c)}.

By the third above bullet, the FSTP-Test is based on ETCI's inventive concepts^{3.b)}, showing what combinations of inCs, COM⁵⁾, exist at all for these cross-checks between refined claim interpretation and refined claim construction (see also the Legend to FIG 2 for its dashed line and double line). This complexity implies: Testing an ETCI for satisfying SPL must indispensably start by its refined claim interpretation – reducing it to the classic claim interpretation or skipping it totally, as also often done, means just practicing irrationality.

The all overarching importance of the FSTP-Test is evident from FIGs 1 and 2 and their Legends. 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 [9,243].

⁵ .a This Court's *Alice* decision introduced “**combinations**” of inCs in an ETCI's SPL test – as test1 in FIG 2 visualizes.

Any specification as a rule 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. 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)'.
.

.b For simplicity is assumed: The ETCI under SPL test has only a single **tentative** COM/C/'technical teaching TTO' /'claim interpretation' (except in⁷⁾). This trivially warrants, C's E-inCs are independent. Otherwise the **true** COM(s) must be determined by trial and error (see⁷⁾).

I.3 The Key Relation of SPL:
Social Concerns \Leftrightarrow 35 USC SPL \Leftrightarrow ETCIs' Properties
 – **Excluding the BRI^{PTO}** –

The FIGs 1 and 2 show this bidirectional key relation of SPL: Its holding due to an ETCI's properties is necessary and sufficient for this ETCI to satisfy SPL.

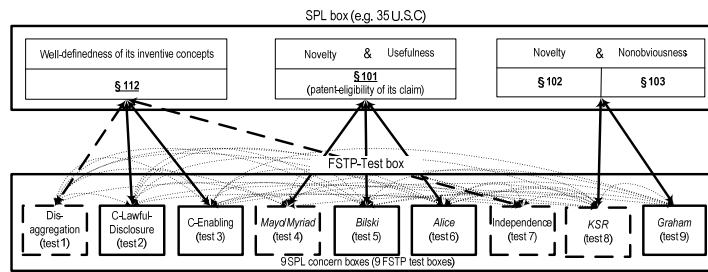


FIG 1: The 9 Logically^Legally Necessary^Sufficient testos of an ETCI alias^{5.b} TT0 alias^{5.b} COM alias^{5.b} C for Satisfying SPL as Realizing this Relation

Legend: The SPL box shows the 4 Sections of 35 USC SPL made-up by 9 social concerns (not yet separated from each other), to be met by a TT0's properties for its satisfying SPL. The FSTP-Test box also shows these 9 SPL social concerns – stating 9 requirements to be met by an ETCI for socially deserving patent-eligibility and patentability, as determined by the Legislator and interpreted by the Supreme Court – but now totally separated from each other. I.e.: The 9 FSTP-test.o, 1≤o≤9, determine whether an ETCI does satisfy all 9 social concerns codified by 35 USC §§ 101/102/103/112.

These 9 social concerns' meanings – necessary and sufficient for granting to an ETCI SPL protection – are in FIG 2 briefly indicated by its testos' "second line comments". Note: The 9 testos totally intermesh all 9 TT0 properties and all 9 SPL concerns, among and with each other.

Bold solid double-headed arrows show, what TT0 limitations are vaguely regarded by the BRI^{PTO} (s. Section II). Bold dashed and fine double-headed arrows show, what also must be and is checked in TT0's refined claim interpretation (≡ BRI^{MBA}) & construction, together ≡ TT0's SPL/FSTP-Test.

The Legend to FIG 1 explained already that and why an ETCI's passing of the FSTP-Test is necessary & sufficient for an ETCI to satisfy 35 USC SPL. Next, **a)-c)** summarize the main principles of the FSTP-Test. Its details then are provided by the Legend to FIG 2.

- a)** TT0's passing its classical claim interpretation & construction tells nothing. By contrast: TT0's passing its refined claim interpretation & construction tells it satisfies SPL. That several tests internally comprise several 'technical' tests (see FIG 2) is irrelevant.
- b)** Thereby holds: The FSTP-Test prompts its user through **ALL** questions it must answer correctly. This is called: "The FSTP-Test calibrates itself with TT0 by the input it thus gets from its user". I.e.: There is no legal or technical 'SPL relevant' question, through which the FSTP-Test would not prompt the user during its calibration. I.e.: After calibration is completed, the FSTP-Test knows about TT0 absolutely everything relevant for its SPL satisfaction test.
- c)** As this information about TT0 would be stored in a random access memory in a data structure PTR-DS mirroring the FSTP-Test [7], **ANY** meaningful question about TT0's satisfying SPL can instantly be retrieved from PTR-DS. The FSTP-Test thus may, by acoustic key word spotting, in realtime participate in a natural language discussion about this TT0.

In short: First the FSTP-Test would ask the user for **ALL** SPL knowledge about TT0 – thereafter it could instantly tell everybody what the correct answer is to **ANY** SPL question about TT0.

The FSTP-Test during execution, after being started by its user, stepwise prompts it for inputting the given information, being

- \forall TT0-elements $X0n, 1 \leq n \leq N \wedge \forall A\text{-in}C0n^g, 1 \leq n \leq N \wedge \forall E\text{-in}C0kn^g, 1 \leq kn \leq K^n, 1 \leq n \leq N, K ::= \sum_{1 \leq n \leq N} K^n$;
- if $|RS| > 0$: \forall TTi-elements $X^*in, 1 \leq n \leq N \wedge \forall A\text{-in}C^*in, 1 \leq n \leq N \wedge \forall E\text{-in}C^*ikn, 1 \leq kn \leq K^n, 1 \leq n \leq N \forall 1 \leq i \leq I$;
- \forall justifications (provided by the resp. ET posc, where necessary by a resp. ET expert);

1) (a)	$COM^A(TT0) ::= CA$	$::= \{(X0n, A\text{-cr}C0n) \mid \forall 1 \leq n \leq N\}$, and	
	$COM(TT0) = COM ::= C$	$::= \{E\text{-cr}C0kn \mid 1 \leq n \leq N \wedge 1 \leq kn \leq K^n : A\text{-cr}C0n = \bigwedge_{1 \leq kn \leq K^n} E\text{-cr}C0kn\}$;	
(b)	$justof^{\forall 1 \leq n \leq N}$:	$A\text{-cr}C0n$ is definite over posc and CA vaguely (↓)/ exactly (↑) describes the TT0;	
(c)	$justof^{\forall^C CAUC}$:	$A\text{-cr}C0n = \bigwedge_{1 \leq kn \leq K^n} E\text{-cr}C0kn$;	
(d)	$justof^{\forall^C CAUC}$:	Biosig-test	passed:

2)	$justof^{\forall^C CAUC}$:	C-Lawful-Disclosure-test	passed:
$\forall \epsilon \in C$ are lawfully disclosed;			
3)	$justof^{\forall^C CAUC}$:	C-Enabling-test	passed:
C 's implementability is lawfully disclosed;			
4)	$justof^{\forall^C CAUC}$:	Mayo-/Myriad-test	passed:
\forall natural law modeling $E\text{-cr}C0kn$ are identified;			
5)	$justof^{\forall^C CAUC}$:	Bilski-test	passed:
$\nexists E\text{-cr}C0kn \in C$ making TT0 an abstract idea;			
6)	$justof^{\forall^C CAUC}$:	Alice-test	passed:
$\exists^A E\text{-cr}C0kn \in C$ making TT0 patent-eligible;			
=====			
7)	$justof^{\forall^C}$:	C-Independence-test	passed:
$E\text{-cr}C0kn$ is independent of $C \setminus E\text{-cr}C0kn$;			
8)	$justof^{\forall^C}$:	KSR-test	passed:
$E\text{-cr}Cikn \nabla E\text{-cr}C0kn$;			
9)	$justof^{\forall^C}$:	Graham-test	passed:
TT0 is patentable, as C 's $Q^{pmgp} > 0$ (over RS).			

FIG. 2: The FSTP-Test – Checking a TT0^{5.b)} for its Meeting ALL 9 Requirements Stated by USC 35 §§ 101/102/103/112

Legend: Up-front two general remarks are in place.

- The horizontal dashed line separates a TT0's refined claim interpretation (above it) from its refined claim construction (below it), the latter ending at the horizontal double line terminating any iterative loop. This clear interplay of an ETCI's refined claim interpretation with its refined claim construction has nowhere ever been shown before.

- An ETCI's SPL test cannot be modeled mathematically by logically just adding the 5 Supreme Court decisions being identified by underlining. I.e., the FSTP-Test must **1.)** put them more clearly and exactly, just as **2.)** appropriately rearrange between them parts of their checks of C without changing anything of their total checking⁶⁾. Both measures are indispensable – as easily recognized at a second glance – for making these 9 tests represent these 5 decisions **1')** sufficiently precise for being 'SPL unquestionable', and **2')** logically meaningful – by disaggregating compound A-crCs into E-crCs – for enabling the user to recognize that C is •)well-defined and •)independent over posc (and eventually prior art), and •)is a complete TT0 specification.

1.)/1') and **2.)/2')** represent subtleties embodied by SPL and ETCIs, which the patent community hitherto has not yet detected, but definitively must be approved by future SPL precedents for avoiding their inconsistencies.

Now a short outline of the working of the FSTP-Test.

Of an ETCI^{5.b)}, it prompts the user to input what it derives from either doc0 (i.e. the specification of this TT0), or its preceding input, or doc1 (representing prior art), by:

- **test1:** •)TT0's ETCI-elements X0n; •)their respective abstract (often compound)^{5.a)} A-crC0n and that they are definite; •)as many such elementary E-crC0nk as deemed necessary for enabling it to input •)how to represent any A-crC as a conjunction of such E-crCs, $1 \leq n \leq N$, $1 \leq k_n \leq K^n$ (thus implicitly defining the COM alias C of TT0^{5.b)}); •) all these E-crCs are definite and TT0 is the conjunction of them (i.e. TT0 is completely described by them); and •)C is well-defined^{6.a)}, i.e. passes the rigorous *Biosig*-test.
- **test2-8:** what its second line briefly indicates, see [182].
- **test9:** what its second line briefly indicates, whereby this test is vastly automated. I.e., the user must confirm the automatically determined 'pragmatic height' [6] of C over any from RS automatically derived "Anticipation Combination, AC". If any AC fails to anticipate C by one of AC's E-crCikn's, then TT0 is determined to be novel&non-obvious over RS, as C's $Q_{pmgp} > 0$ over RS [182].

After this explanation by FIGs 1/2 of SPL's key relation and these hints at the principal working of the FSTP-Test – in particular at its mirroring the interrelation between ●the refined claim interpretation for the ETCI at issue, i.e. between determining ETCI's meaning and its modelling by C and ●the refined claim construction for TT0 by means of this C – it is logically next to trivial that there is only a single such sibling pair (modulo its isomorphisms [6,7]) for designing an SPL satisfaction test uniformly working for any ETCI^{6.c)}.

As the BRIP^{TO} is not isomorphic to the refined claim interpretation – as shown above and by Section II in comparison to BRIP^{PHI} and BRIM^{BBA} – a BRIP^{TO} based such ETCI SPL satisfaction test simply does not exist.

⁶ The average FSTP-Test user may skip this footnote, as it is immaterial in its daily work. It just provides 3 basics for warranting that the FSTP-Test logically indeed avoids inconsistencies in ETCI's SPL precedents.

.a The since the axiomatic foundation of Mathematics⁴⁾ existing notion of “well-defined” means here: The so qualified mathematical statement is based on definitions of inCs and SPL testing pragmatics using only axioms supported by models common to both. This is indicated by the pictogram ▼ standing for “the item left of it is ‘well-defined’ over the item right of it” (see [9]).

.b The FSTP-Test is an “algorithm/program scheme”, as its conjunction of the 9 FSTP-testo's is a legal FFOl (= finite first order logic) expression about ALL SPL relevant information about C (input by the user). The truth of this conjunction on a C alias TT0 is necessary and sufficient for its satisfying SPL. This renders the sequence of executing the 9 testo's meaningless.

.c These 9 testo's hence only in total assess, of a TT0^{5.b)}, whether it satisfies any SPL requirement (FIG 1 Legend).

II. MORE ABOUT THE BRI^{PTO}'s UNTENABILITY

Section I explained •the interplay between an ETCI's legally&logically indispensable 'refined claim interpretation & refined claim construction', •why this sibling pair is the only one⁶⁾ enabling designing necessary&sufficient ETCI SPL satisfaction tests, •and that this excludes using the BRI^{PTO} in any legal decision.

Thus, while Section I showed that the *MBA* framework's requirement statements implied the answer already to the Petition's question 1) – if CAFC&PTO approved this answer – this Section II replies to two more direct BRI^{PTO} questions, i.e. not addressing this *MBA* framework, yet asked at any US patent event [242].

Therefore, this Section II is redundant. But, its less *MBA* tied elaborations on the BRI^{PTO}'s 'court illegality' shows that its current use has anyway been directly banned already twice, first by the CAFC's *Phillips* decision, thereafter by this Court's *Biosig* decision, too.

These multiple bans help, as the BRI^{PTO} is extremely convenient, hence incredibly persuasive and popular, by insinuating the gross misbelief – to virtually all examiners, patent lawyers, ..., and even to CAFC boards – that an ETCI's claim interpretation may always ignore its specification's limitations, even if this misrepresents the ETCI. This BRI^{PTO} illegality is increased, if it thereby expands ETCI's scope to dysfunctional embodiments.

In total, the BRI^{PTO}'s current use vastly removes clarity from any patent specification and hence robustness from virtually any ETCI's claim interpretation [243].

II.1 The BRI^{PTO} is Legally Untenable, as for Many ETCIs:
scope(BRI^{PTO}) \supset scope(BRI^{PHI}) \supset scope(BRI^{MBA})

Up-front a short summary as to the acronym “BRI” is of help: Any claim evidently has infinitely many ‘broadest reasonable interpretations, BRIs’, as long as it is not determined what “reasonable” at all means. Historically, three different reasonablenesses have emerged in SPL precedents, defined by •the USPTO’s BRI guideline, by •the CAFC’s *Phillips* decision, and by •this Court’s *MBA* framework – any of these 3 reasonablenesses incrementally refining its predecessor. Hence, the above indexing of this BRI acronym as well as its 2 ‘scope subset’ relations, if it is applied to an ETCI.

Thereby the wording of the current version of the PTO’s BRI guideline [14] clearly refers to the CAFC’s *Phillips* decision (and its implied BRI^{PHI}), but vastly misrepresents it and totally ignores this Court’s *MBA* framework (and its implied BRI^{MBA}). It nevertheless insists in the legitimacy of the BRI^{PTO}’s use also in courts’ decision – on unclear grounds. And, some CAFC boards ignore the BRI^{PTO} and apply the BRI^{PHI}, while other ones ignore the own BRI^{PHI} and apply the BRI^{PTO} – without explaining this strange behavior. Finally, none of these parties hitherto only tried to find out – just as the US patent community – what this Court’s by its *MBA* framework clearly implied BRI^{MBA} is. This chaos is broadly considered as embodying disastrous socio/economic potentials, as discrediting patents in ETCIs because destroying their robustness [201]. Thus, it deserves a detailed analysis – provided next.

First note a toy patent⁷⁾, showing that the above headline's 'scope subset relation' trivially holds, for many ETCIs, between their scopes, if determined by the

- **BRI^{PTO}** subject to this Petition's question 1), the
- **BRI^{PHI}** subject to the CAFC's *Phillips* decision, and
- **BRI^{MBA}** subject to this Court's *MBA* framework. If the headline instead had considered the 'sub-equal-set relation', then it would hold for any ETCI.

Today, the first two such reasonablenesses of BRIs of an ETCI are in use and questioned publicly [201,242]. The third such reasonableness – the only one actually capable of supporting showing that an ETCI satisfies SPL – is hitherto nowhere mentioned. Therefore, all three such reasonablenesses are discussed, next.

- The **BRI^{PTO}** reasonableness is since the second half of the 20th century – ETCIs then hardly existed, yet – applied by the PTO. Of its much younger according versions of its BRI guideline, here only the most recent one is of interest [14]. Its wording oversimplifies claim interpretation to an extent rendering it totally unreasonable⁷⁾, as grossly misleading claim interpretation, especially of ETCIs, due to its imprecise- and incompleteness, i.e. irrationality⁷⁾. Nevertheless, the PTO insists in it as the basis of any other of its §§ 101/102/103/112 guidelines.
- On the courts' side, the CAFC identified in 2005 this irrationality of the **BRI^{PTO}** and raised by its *Phillips* decision the reasonableness in claim interpretation of an ETCI to some degree by imposing logically/linguistically evidently necessary irrationality limita-

tions on the ‘**claim terms**’ interpretation of a claim(ed invention)’s wording. Yet, while the BRI^{PHI} correctly limits claim terms’ meanings to what is disclosed for them by this ETCI’s specification, it still does not yet consider that claim interpretation additionally must provide information about this ETCI answering the questions: • ‘Is it patent-eligible by this Court’s *MBA* framework, at all?’ and if so • ‘What of ETCI’s total inventivity contributes to ETCI’s patentability?’

- Consequently, the BRI^{PHI} is unable to establish consent about which ETCIs SPL actually protects. This forced this Court to clarify by *Mayo* – by reinterpreting 35 UCS §§ 101/102/103/112 – that SPL does take these new properties of ETCIs into account socially adequately and hence may robustly protect ETCIs by SPL. It thus ended this absurd claim interpretation conflict, caused by new properties of ETCIs from CTCIs simply not known (to this extent).

By this refinement of its interpretation of SPL in favor of enabling it to protect also ETCIs subject to their properties, this Court had to add – by its *MBA* framework – additional limitations to the BRI^{PHI}. Namely: The BRI^{MBA} requires for ETCIs’ SPL satisfaction that their new properties are socio/economically reasonable, too (and complete, see Section I.3).

Summarizing this clarification: The BRI^{PTO} first broadens the scope of an ETCI by broadening the meaning of its natural language single sentence so far as reasonably only possible and declaring this meaning, M^{BRI} – totally disregarding ETCI’s specification and the SPL concerns this Court clarified by its *MBA* framework as

to ETCIs – as ETCI’s alleged scope. Of **M^{BRI}** any claim interpretation **TT*** with a smallest number of limitations may be picked-up and checked over the ETCI’s specification⁵⁾ for sentences or fragments thereof that – glued together – allegedly disclose that **TT***.

Thus, for an ETCI, applying the **BRI^{PTO}** this way – shown in Section I to be illegal – will often determine ETCI’s scope so large that it illegally pretends to comprise an ETCI embodiment, **TT***, not satisfying SPL.

Yet – **AND THIS IS IMPORTANT** – the original **BRI^{PTO}**’s use would be fully legalized, if its application to the **M^{BRI}** were refined as follows: The **BRI^{PTO}** must for any alleged ETCI embodiment, **TT*** – which it picks from **M^{BRI}** – check **TT***’s meeting all SPL requirements to be met for its satisfying SPL, too, i.e. for **TT***’s passing also the FSTP-Test of FIG 2, and otherwise discard **TT***. The **BRI^{PTO}** thus, by performing these 9 tests, namely became equivalent to the **BRI^{MBA}** – which, for determining a COM alias C to be fed-back into the refined claim construction (for testing whether C’s **TT0** satisfies^{5.b)} SPL), also initially must involve some guessing. This initial input guessing for the refined claim construction – shown inevitably by Section I.3 – indeed would ideally be guided by the **BRI^{PTO}**.

The rest of this Section II.1 shows by a toy patent the above presented necessity of applying increased scrutiny in an ETCI’s refined claim interpretation – the latter’s indispensability has been proven in Section I.3 – which is not achievable by using the **BRI^{PTO}**, not even by using the **BRI^{PHI}**, but only by using the **BRI^{MBA}**.

The toy patent⁷ explains the 3 BRIs in a nut shell.

⁷ **.a** **This toy patent's specification** describes: a time parameter of a known process (e.g. a data transfer technique started over the Internet with delay times monitored by one of the monitoring techniques known in **.b** by the posc, resp. in **.c** by some logics of some new organism, in both cases alias tentative COMs^{5.b}) issuing a signal for this communications connection's data transfer to change-over from Internet to ISDN/PSTN) that originally has – by the state of and the prior art for it – the delay value “unpredictable”, a user application (e.g. a telephone call) of this process that requires its modification such that its delay value is “permanently ≤ 0.5 sec”, that such low delays hitherto could not be permanently guaranteed hence this modification becomes the CTCI/ETCI, for the application for which it is designed, and which is useless if delays >0.5 sec occur, and that and how the CTCI/ETCI for this application manages to always achieve this low delay. The claim's wording identifies this application's use of this CTCI/ETCI, but does not explicitly repeat a delay time limit of ≤ 0.5 sec.

.b **This toy patent's BRI^PTO/BRI^{PHI}**. The BRI^PTO, regarding only the claim's wording, concludes: there is no limitation for CTCI's delay time and hence the CTCI is anticipated by the state of the art. The BRI^{PHI} – imperatively starting from the specification's part(s) describing the invention – finds that the CTCI's application imposes on the delay time the limitation “permanently ≤ 0.5 sec”, i.e. excludes the “unpredictable” delay as contradicting the CTCI, thus rendering it patentable. BRI^PTO/BRI^{PHI} thus determine two different true COMs^{5.b}), COM^PTO and COM^{PHI}. Finally holds, BRI^{MBA} = BRI^{PHI}, as this ETCI is not model-based.

.c Its BRI^{MBA} in this case (see **.a**) – monitoring&signalling is performed by a natural phenomenon, inC, part of the hence model based ETCI – imposes the new limitation that this ‘remaining part’ is unpatentable as anticipated (as comprising any monitoring&signalling). Yet, the ETCI is patentable, as this ‘remaining part’ is transformed into a patentable user application (telephone call) of the natural phenomenon inC, as the latter is tied into this user application. Thus ‘inC + its being tied-in into a user application’ is *Alice's* ‘inventive concept’ that achieves ETCI's patentability, as ‘remaining part + inC’ \equiv user application.

The same may hold for patent-noneligible remaining parts & abstract ideas instead of natural phenomena.

**II.2 Finally: This Court, by its *Biosig* Decision,
Directly Banned the BRI^{PTO}**

This Court's unanimous *Biosig* decision nowhere explicitly refers to its unanimous *Mayo* decision. This, at the first glance, may seem that *Biosig* intended to preserve some distance to *Mayo*. Yet, this impression is wrong: The contrary applies. Just as *Mayo* showed that the then commonly used notion of 'patent-eligibility' is right from its outset based on an oversimplification, also *Biosig* showed that the then commonly used notion of 'definiteness' is right from its outset based on an oversimplification – as in both cases evidenced by the difficulties caused by the application of these terms to ETCIs. Hence, *Biosig* seamlessly complements *Mayo*.

This complementarity is also shown by the following. *Biosig* rigorously – though only declaratively – clarifies the meaning of the term 'definiteness' in an ETCI's SPL satisfaction test (thereby reasoning independently of *Mayo*). Yet, translating *Biosig*'s declarative statement into an equally rigorous operative test of this 'definiteness' notion inevitably requires ETCI's refined claim interpretation & refined claim construction, as explained in detail by Section I – as already required by *Mayo* (and also explained there).

This being on the same page of both decisions – as to refining the commonly used SPL pragmatics to the needs of ETCIs – and yet *Biosig* being independent of *Mayo* is of particular importance of *Biosig*'s verdict about the BRI^{PTO}, elaborated on next.

By the below quotation from its *Biosig* decision, this Court implicitly – nevertheless directly – banned the today practiced, notionally grossly misleading, use of the BRI^{PTO} in testing an ETCI for satisfying SPL. It tells:

*‘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’.*

Yet, by using the original BRI^{PTO} ‘a court [does] ascribe **some** meaning to a patent’s claims’: The notion “broadest” in the BRI^{PTO} is based on the unlimited “V” quantor over an indefinable set of documents, i.e. is indefinite by AIT^{1.b}), and thus excludes clarity & certainty [243] – as explained in Section II.1.

Three final remarks may be helpful: This quotation

- does not apply to the refined use of the BRI^{PTO} presented by the end of the Section II.1.
- counters the often heard 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 a complex invention, with e.g. more than 10 sophisticated limitations that the specification discloses. If these were imported into the claim’ wording, it would comprise several pages and be completely incomprehensible.
- The BRI^{PHI} even requires this import (see Section II.1 and the CAFC’s *DDR* decision) – yet often is ignored.

CONCLUSIONS FROM THE ARGUMENT

The *MBA* framework's slight raising the intellectual bar for patent applications' drafting, interpretation, and examination has proven very productive, as shown here by the preceding comments on the above question 1) and the below answer to it. It provides – about the SPL and its protection of inventions, especially of ETCIs – to judges, inventors, investors, patent lawyers, the USPTO, and the public much more clarity/certainty and robustness, i.e. a much higher quality, than possible pre-*MBA* framework.

Hence, the first conclusion is that this Court please grants this petition submitted by Cuozzo for clarifying both questions.

The second conclusion then is focused on question 1) and is based on three considerations:

- The new head of the USPTO, M. Lee, since her inauguration repeatedly, e.g. at [243], emphasized that her main objective is to contribute to and achieve by the USPTO the above much higher quality of patents – in terms of their clarity/certainty and robustness – and of her administration's processes on them.
- As the trivial toy patent⁷⁾ shows, the USPTO has no chance to achieve this objective: For many ETCIs, the non-refined BRI^{PTO} – as it currently is practiced – determines a larger scope than that required by the refined claim interpretation of this Court's *MBA* framework. This may, for many ETCIs, exert a

disastrously faulty impact on this ETCI's claim construction as finding it is indefinite and/or patent-noneligible and/or obvious.

- Moreover, dozens of CAFC and USPTO decisions show that the often heard argument is wrong that the BRI^{PTO}'s flowery addendum "in the light of the specification" in its respective guideline [14] would fix its misconception. And even if this addendum were meticulously obeyed, both authorities would still ignore this Courts *MBA* framework – as the toy patent demonstrates^{7.c)} – and hence totally unable of catering the inevitable needs of Emerging Technology Claimed Inventions, ETCIs.

Thus, the second conclusion is that the answer to question 1), in expanded form, is: "YES, the CAFC erred as to the non-refined BRI^{PTO} – but NO if the USPTO refines the use of its BRI^{PTO} as outlined by the end of Section II.1".

(WC < 5.840)

Respectfully Submitted,

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