

Teva's Impact on the US National Patent System ("NPS"): The Mayo/Biosig/Alice ("MBA") Framework made It a Rough Diamond – but Rough for Ever?

*Teva Cuts this Diamond and thus may Create a Historic Mega-Trend in SPL, also
Internationally.*

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Abstract— At a first glance and having *Markman* in mind, the Supreme Court's *Teva* decision seems to be only a minor shift of power as to developing Substantive Patent Law ("SPL") precedents for Emerging Technology Claimed Inventions ("ET CIs") in the US NPS: **A)** Away from the CAFC to District Courts. Yet, this allegedly minor power shift likely launched a profound trend: **B)** Away from totally diverging *MBA* interpretations¹⁾ by CAFC boards, towards the *MBA*-framework²⁾ based SPL scientification. Sections V/VII show the ease of joining this *MBA/Teva* trend by all ET patents/applications – and of leveraging on the vast advantages it implies³⁾.

Keywords—*Mayo/Biosig/Alice; paradigm shift; SPL scientification; emerging technology claimed invention; claim construction; facts finding; semiotics*

I. THE SUPREME COURT'S *TEVA* DECISION : A GAME CHANGER IN SPL? EVEN CREATING A HISTORIC MEGA-TREND?

At a first glance and having *Markman* in mind, the Supreme Court's *Teva* decision seems to be only a minor shift of power as to developing SPL precedents for ET CIs in the US NPS: **A)** Away from the CAFC to District Courts. Yet, this allegedly minor power shift likely launched a

profound trend: **B)** Away from totally diverging *MBA* interpretations¹⁾ by CAFC boards, towards the *MBA*-framework²⁾ based SPL scientification. Sections V/VII show the ease of joining this *MBA/Teva* trend by all ET patents/applications – and of leveraging on the vast advantages it implies³⁾.

In the US *Teva* may become a dramatic game changer: **•** The Supreme Court's *MBA*-framework for ET CIs is still being made-down by leading patent experts in nationwide conferences, and the majority of CAFC boards at best respects it by lip-services, as Section VI shows and earlier stated in [208]. **•** Meanwhile, the Supreme Court's *Teva* decision [172] invites patentees et al to shift the development of SPL precedents in favor of ET CIs – after *DDR* [156] practically stalled at the CAFC (see Section VI) – from the CAFC to District Courts, thereby clearly & without any reservation supported by a CAFC board's *LBC* decision [220], yet other CAFC boards' decisions raising again questions (see Section VI).

History tells: In this political overall situation, the Supreme Court's *Teva* decision [172] will soon unfold the aura of a "white knight" saving the *MBA*-framework – in spite of the CAFC's attempt to counter it by its opposite *Teva* understanding [213].

[172] cannot achieve an instant such shift of power, but must develop it as a trend (see Section VII). Namely: To the bulk of the patent community⁴⁾ the *MBA*-framework still

¹ CAFC boards still vastly ignore the *MBA*-framework but interpret *MBA* individually, thus confusing the US NPS (see Sections VI/VII). Indeed, originally the whole patent community had difficulties to grasp this *MBA*-framework⁴⁾, but today its rigorous analysis by AIT [2] shows that it is about to put the US NPS into the international lead. I.e.: While scientifically the *MBA*-framework originally was considered as probably being at best just some rough gemstone, it unexpectedly became a cut diamond – extremely amenable to an axiomatically founded "SPL science" [197,202].

² The *MBA*-framework had been developed, by the Supreme Court, for enabling the CAFC to achieve consistent and predictable substantive patent law ("SPL") precedents as needed by ET CIs ("Emerging Technology Claimed Inventions"). Without the semiotics introduced by this groundbreaking framework, it proved impossible to achieve this consistency. This culminated in the resp. clashes in the CAFC, but has been indicated before by the latter's high reversal rate of resp. District Court decisions – being the main problem the Supreme Court solved by *Teva*.

³ For the many here not touched on further fundamentally beneficial impacts of the *MBA*-framework and its semiotics on the SPL see [198].

⁴ The author looks at the SPL paradigm shift – which the Supreme Court enforced by its re-interpreting 35 USC §§ 101/102/103/112 in favor of ET CIs' needs, i.e. by its *MBA*-framework – from the AIT [2] point of view, which greatly facilitates recognizing SPL semiotics implied by these decisions as well as the awareness of such ET CI semiotic needs in other NPSES. The bottom line is: These 6 decisions took/take the ET orientation of the US NPS – and with it the whole US ET oriented R&D scene [216,198] – many years ahead of all other NPSES, worldwide. This holds as to creating ET CIs, i.e. as to the innovativity in the ET areas, just as to the so inflicted SPL scientification indispensable for rationally controlling the management of R&D results in many ET areas as to their SPL aspects.

There is no need that a broad majority of the patent community completely overcomes the cultural/professional gap between it and AIT [2]. It nevertheless will rapidly grasp this AIT view at ET CIs' SPL precedents in the Supreme Court's notional representation for its *MBA*-framework. There are enough patent experts already on this way, as the USPTO's IEG activities show, just as at least 2 CAFC decisions.

appears to be an indeed very “rough gemstone” – created by the Supreme Court in its striving for establishing by its 6 unanimous SPL decisions in *KSR/Bilski/Mayo/Myriad/Biosig/Alice* a future-proof framework for incentivizing the development of innovativity by ET CIs and the leveraging on its enormous potentials for the US society, as *Mayo* outlines. I.e., this crowd has not (yet) recognized⁵⁾ the brilliance of the diamond behind that rough “outer shell” in Justice Breyer’s metaphor¹¹⁾. On this today’s common knowledge basis of the patent community, the *Teva* power shift cannot unfold as a single leap ahead of this crowd as a whole, but solely as trend in it – also as CAFC boards still construe *de novo* “contra-MBA/Teva claim constructions”. I.e., by its sure impact **A)** *Teva* establishes a far reaching carrier for a resp. US and international mega-trend **B)**, as Sections V and VII suppose.

This *MBA/Teva* trend **A)+B)** would mirror the efforts of the Congress by its AIA and of the Supreme Court by its *MBA*-framework: to proactively stimulate the innovativity of the US R&D⁶⁾. Thus, as to the US, Section VII postulates there is a good chance that also any negative rhetoric about the AIA will completely disappear within a year – as two weeks ago broadly confirmed by leading experts of corporate and university R&D from various ET areas [215] – and the author predicts this for any negative rhetoric about the *MBA*-framework, too. Due to the position of the US, its *MBA/Teva*-trend then would expand to most NPSes worldwide, as historic international Mega-trend in SPL. The FSTP-Project (FSTP = Facts Screening/Transforming/Presenting) has been focused on it since *KSR*.

II. AN ALL OVERARCHING REMARK, UP-FRONT.

Turmoil between large communities and their master-minds – such as the last years’ turmoil between the patent community and the Supreme Court, caused by the latter’s line of unanimous decisions in *KSR/Bilski/Mayo/Myriad/Biosig/Alice* – occur whenever they undertake an intellectual quantum leap ahead, philosophically called “paradigm shift”, i.e. here: the “SPL paradigm shift”. Historic examples are the early Egypt community of faith when Ikhnaton discovered that one almighty God comprises any god; the old Greek academia community when Pythagoras discovered the incommensurability of particles; the early 20th century com-

munity of physicists when Einstein discovered the relativity of time; And now: the patent community when the Supreme Court disclosed, by its 6 above decisions, its groundbreaking insights into hitherto hardly noticed specific qualities of inventions in ETs, necessary for achieving consistent SPL precedents for ET CIs – alias: a consistent view at rational objectives of innovation – e.g. ET CIs’ exemptions from patent-eligibility.

III. ET CIs’ NEEDS – NEW IN SPL PRECEDENTS.

Most patent experts are not familiar with Analytic Philosophy [130,218,219] – thus are unaware of the fundamental intellectual differences in thinking of inventions in CTs or ETs (CTs = “classic technologies”). Thinking about ET CIs encounters intellectual booby-traps not existing with CT CIs. Hence briefly explaining is in place that the *MBA*-framework enables overcoming these pitfalls embodied by ET CIs.

CT CIs always are material-based. By contrast, all ET CIs – from ET areas of cutting edge technologies of some classical/established technologies, such as from Construction Technologies, Transport Technologies,, up to Electronics Technologies, Computer Technologies, Software Technologies, Communications Technologies, or from genuinely emerging areas of technologies, such as from BioTech, LifeCycleTech, NanoTech – are invisible/intangible and hence plainly fictional/intellectual⁷⁾.

Mayo/Alice therefore •inevitably had to require describing ET CIs by their intellectual “inventive concepts, inCs”, for so identifying what the usefulness of an ET CI is, described by its inCs’ total impact on its immaterial/invisible/intangible merely intellectual being. Thereby an inC’s meaning is defined/modeled by its impact on this merely intellectual ET CI, which hence •inevitably requires a mathematical model of this immaterial/intangible/invisible merely intellectual being alias ET CI [142].

There is no rational alternative to so structured thinking about systems, here ET CIs. Free-style thinking⁸⁾ enables logical antagonisms, known since ever [218] – in SPL precedents called unpredictable inconsistencies, today overcome (see Section V).

Models are e.g.: The “Balance sheet”/“P&L statement”/“Cash Flow statement” model of the USGAAP; the “ISO/OSI” model of telecommunications; the “molecular bonding forces” models of nano-technology; “RNA/DNA” models of genetics; the “Natural Language” models of Advanced IT; and here the “*MBA*-framework” model of SPL –

⁵⁾ Most of them even are not aware, at all, that the Supreme Court by these decisions is not just voluntaristically performing an incomprehensible paradigm shift for the established classical interpretation of 35 USC SPL, but that this indeed rough paradigm shift is an inevitable refinement of the SPL framework of the US NPS for enabling it to unfold the economic and many otherwise beneficial potentials of ET CIs – as their non-refined claim interpretation&construction proved totally incapable of predictable/consistent SPL precedents about them (being the minimal requirement to be met by the future SPL based “Patent Technology” [182], not achievable by the highly deficient non-refined SPL interpretation).

⁶⁾ For accelerating the creation of ET CIs, the Congress had years ahead already initiated the AIA. I.e., the *MBA*-framework is, right from its outset, fully in sync with the AIA. Thus, seen from this future shaping point of view, the Supreme Court accordingly pushes, by its *Teva* decision and its minor power shift, the US patent community to become aware of the many advantages for the US society embodied by the *MBA*-framework²⁴⁾.

⁷⁾ and thus embody serious new SPL problems, caused by a reason (explained next) not existing with classic technology CIs – why a CT CI’s SPL test can get along without being tested by its inventive concepts. Although, these would greatly facilitate and improve CT CI’s SPL tests, too.

⁸⁾ Free-style thinking means: •Not describing properties at issue of something, here of an ET CI, by using the notion of its “inventive concept(s)”, and/or •not defining the meaning of an inventive concept by using the notion of a “model”, on top of which this meaning is defined by the impact this inventive concept has on this model. Not defining this model has been practiced in Elementary Particle Physics until the 60s by not defining for the Energy operator, on which Hilbert space it is used – yielding inconsistent energy spectra even for the hydrogen atom.

some standardized, all implicitly used in dealing with SPL and resp. ET CIs, without noticing it, neither by their inventors/investors nor later by examiners/lawyers/judges/.... The philosophical synonym of the AIT term model is “paradigm”, the linguistic one is “semiotics”, the mathematic one “referenceVbaseVcoordinate system”.

Using a model (and the inCs defined by means of it on its top) enables precisely describing also an ET CI – i.e. an immaterial/intangible/invisible merely intellectual matter – on top of it by a “conjunction” of these inCs, although the model itself is not understood precisely. This is practiced successfully with mathematics’ “axioms and theorems/proofs on top”, with physics’ “laws of nature and differential equation systems on top” – and now with SPL’s “MBA semantics/semiotics and ET CIs on top”.

IV. SPL SEMIOTICS NEEDED BY ET CIs – EVOLVED BY THE 6 DECISIONS.

This fundamental insight of the inevitable need of a logically clean notional framework for ET CIs for enabling consistent SPL precedents for them (equivalent to “predictable SPL precedents for them”, as SPL is of FOL, proof here omitted) could be met by the Supreme Court only by a refined re-interpretation of 35 USC SPL, as performed by its 6 decisions in *KSR/Bilski/Mayo/Myriad/Biosig/Alice*. This necessity is caused by ET CIs’ new and more complex phenomenology than that of CT CIs.

These 6 decisions were broadly misunderstood, assuming by them the Supreme Court would α) criticize the CAFC as being too rigid as to their issues [214], and β) not provide guidance as to how else to deal with these new SPL issues [201].

Yet, the contrary is correct, namely that these 6 decisions

- α) did not criticize the CAFC as being too rigid as to these cases’ issues, but as its approach to the new ET CI issues being short in its profundity: In *KSR* the obviousness issue, rejecting the CAFC’s TSM test as too flat; in *Bilski* the patent-eligibility issue, rejecting its MoT test as too flat; in *Biosig* the definiteness issue, rejecting its “insolvable ambiguity” test as too flat; rejecting its *Bilski/Mayo/Myriad/Alice* decisions as too flat as not recognizing the new needs of ET CIs⁹), and
- β) did provide guidance as to how else to deal with these new SPL issues: namely, by requiring •in *KSR/Bilski/Myriad* to notice that an ET CI may be made-up from also patent-noneligible building blocks, as being of pre-*KSR/Bilski/Myriad* unknown SPL properties of “human creativity”, “abstract ideas”, “natural phenomena”, •in *Mayo* to use, in an ET CI’s claim interpretation¹⁰) the pre-*Mayo* unknown SPL notion of “inventive concept”, just as in its following claim construction, for separating the ET CI’s patent-eligible from its patent-noneligible building blocks for clarifying its patent-eligibility and patentability, •in *Biosig* to

⁹ These 3 tests and 4 decisions indeed are rigid in oversimplifying the resp. new ET CI issues to an extent disabling their patent-eligibility/-ability.

¹⁰ – i.e. in the SPL part of the process of factfinding *Teva* deals with (see Section VI) –

proceed as logic requires for determining ET CI’s definiteness, i.e. not to use the “BRI” (as contradicting US 35 § 112.2) and the “insoluble ambiguous” test (as incomplete) •in *Alice* how to determine, whether ET CIs comprise inventive concepts, transforming their patent-noneligible building blocks into patent-eligible applications.

The SPL α)/β) semiotics, by patent professionals to be used for their everyday businesses, though with precised notions as Justice Breyer invited¹¹), is very amenable to scientification as understood by I. Kant¹²). It enables “Innovation Expert Systems” [198], capable of much of the work today performed by/in SPL experts/contexts – by Chief Justice Roberts envisaged even for the quite general legal context [210].

V. CLAIM CONSTRUCTION, ITS NUMBER OF FACT FINDINGS – AND *TEVA*.

Due to the Supreme Court’s *Teva* decision [172] dealing with this SPL issue¹³), a panel discussed it under various aspects at the recent FCBA meeting [215]. Yet, a fundamental aspect involved therein¹³), the AIT [2] notion of “separation

¹¹ Justice Breyer [69]: “Different judges can have different interpretations. All you’re getting is mine, ok? I think it’s easy to say that Archimedes can’t just go to a boat builder and say, apply my idea [of a law of boats’ water displacement]. All right. Everybody agrees with that. But now we try to take that word “apply” and give content to it. And what I suspect, in my opinion, Mayo did and Bilski and the other cases, is to sketch an outer shell of the content, hoping that the experts, you and the other lawyers and the CAFC, could fill in a little better than we had done the content of that shell. So far you’re saying, well, this is close enough to Archimedes saying “apply it” that we needn’t go further.”.

The last sentence’s criticism clarifies the point: The term “apply it” does need an appropriate refinement of Archimedes’ water displacement semiotics being the “outer shell” of a new boat building semantics – but these patent experts filled nothing alike into this “outer shell”.

¹² I. Kant [219]: “I maintain that in every technical teaching so much science is embodied as Mathematics” – without changing the semantics of his famous postulate, freely translated into today’s SPL language. It is the guiding principle of Analytic Philosophy, just as of the FSTP-Project.

As to α)/β): In spite of its unavoidable high level of abstraction in communications, its meaning is precise as limited to SPL, i.e. logically/linguistically subject to highly limited interpretation, enabling even an axiomatically founded “SPL/Innovation science”/“Patent Tech.” [208,182].

¹³ *Teva* actually deals with 2 different issues: The “factfinding” for a CI (thus determining what the meaning is of the CI) and the “claim construction” using it (thus determining whether a CI of this meaning meets the needs of SPL, i.e. is patent-eligible/-able, ...).

Just for notional clarification: The meaning of the SPL term “factfinding” (for a CI) is tighter than that of the SPL term “claim interpretation” (also called “construing the claim”), in that the ignores any procedural limitation in factfinding (e.g. controlled by FRCP 52) – the notion of “procedural” including “judicial managerial”. If all procedural limitations are left away, the meanings of both SPL terms are the same. [220] shows: The amount of scrutiny required by procedural aspects in the notion of “factfinding” may exceed the amount its sub-notion “claim interpretation” requires.

of concerns” [122], was not addressed as totally unknown in the patent community¹⁴.

Therefore the panelists, just as the parties in *Teva*, could only concede that – but not also analyze why – at a careful look at a fact or its use in claim construction, it may turn out that it is not evident, whether it has the for *Teva* decisive property: to be based on extrinsic evidence, making this fact an extrinsic one. This analysis namely would require, first of all, identifying and separating the concerns taken care of by this fact – as only knowing all the concerns this fact embodies (potentially only partly) and their interrelations among each other and to other concerns of this ET CI enables recognizing whether this fact is an extrinsic or intrinsic one.

Thereby *Teva* does not distinguish, whether a CI is a CT CI or an ET CI, while the following elaborations vastly focus on ET CIs: The evident reason being that ET CI’s “technical” facts’ precise meanings mostly cannot be dependably determined by legal personal, i.e. without basing this clarification on an expert’s statements. I.e.: ET CIs’ facts often are extrinsic facts, a priori (For the notion of fact see below).

“Separation of concerns” denotes a System Design principle, which is unconditionally to be applied in any system’s analysis¹⁴). Applying this principle to ET CIs shows: They all are subject to the same 4 kinds of SPL caused “ET CI concerns”: The

- 1.) “facts finding” concern and the “claim construction” concern, as an ET CI must claim a patent monopoly for its invention defined by its facts,
- 2.) “social” concerns underlying them both, as an ET CI must be patent-eligible/-able by meeting the social requirements encoded/stated by 35 USC §§ 101/102/103
- 3.) “inventive” concerns, as *Mayo* requires that this caring for these social concerns be modeled by inventive concepts, inCs [11^{page11}], and
- 4.) “creative” concerns – 1-to-1 sub-concerns of the inCs – as an ET CI must identify its specific facts created for the inCs¹⁵), as required by 35 USC § 112 and *Teva*, modeled by a creative concept, crC, within any inC – consistent to *Mayo* [11^{p11}].

These introductory elaborations – especially the preceding paragraph – enable the below 5 fundamental statements, as to *Teva*. Some of them are practice oriented and hence simple to grasp, while the other ones are “SPL overall insights minded” and hence of higher notional complexity. Here also comes a reminder: For simplicity an ET CIs has only a single interpretation TT0¹⁶) (M=1, see below, as

usually is the case anyway), i.e. that below any occurrence of “ET CI” stands for “TT0”, but¹⁷ holds also here.

- In *Teva*’s “factfinding”, for an ET CI, its facts always are based on its inCs’ crCs, as explained next, whereby of all facts found usually only a subset is needed for construing ET CIs claim construction – as some facts may be redundant or belong to its different TT0s (if these exists). Any fact represents a part or all of the logic conjunction of crCs of its GS(TT0) (“Generative Set of TT0”), as the latter - describes all properties of all “ET CI-elements” XOn, n=0,1,2,...,N. W.l.o.g. and for simplicity, an ET CI’s facts are assumed to be modeled by its crCs “immediately”, 1-to-1 embedded into its inCs.
- Factfinding comprises a level of higher complexity than hitherto commonly known. By [11^{p.10-11}] in post-*Mayo* SPL an inC is a legal concept, leC, embodying a creative concept, crC, i.e. inC \equiv leC(crC) \equiv <leC,crC> \equiv crC(leC), thus mirroring the dispute about its legal and technical aspect’s non-primacy (hence called a “mongrel” in several cases), whereby neither the crC’s nor the leC’s natural language presentation – the District Court judge would insist in – need to be unique.
- By *Teva*, together with any fact found for a test (of FIG 2, see below), also the fact’s in- or extrinsic evidence is significant. Commonly known hitherto is that extrinsic evidence often is needed for resolving disputes, whereas other crCs and leCs always get along with intrinsic evidence. Yet, extrinsic evidence may often be needed also for resolving a dispute about a crC’s legal presentation by its leC, as this legal presentation of this crC may imply a technical statement about it, which the judge cannot decide or only detect – and which, hence, in cooperation with it, also must be removed by extrinsic evidence support: By modifying crC or even leC.
- By *Teva* the Supreme Court expands its *MBA*-framework to legally qualified data.

The *MBA*-framework elaborates legally on inCs (taking care of an ET CI’s social concerns, see above), but omits clarifying the inCs’ legal relations to ET CIs’ subject matters (here modeled by the inCs’ crCs, see above). This notional missing link between the *MBA*-framework’s inCs and the ET CIs’ subject matters – i.e. the legal qualification of the

¹⁴ From System Design it is known that not separating a system’s concerns in its facts when analyzing – i.e. not meticulously separating this system’s requirements from each other, as often practiced in everyday CI tests for their satisfying SPL – is extremely error prone with errors often hardly detectable. This risk exists especially in SPL testing an ET CI, due to the properties of ETs requiring additional scrutiny (see Section III).

¹⁵ created by the inventor and making-up the invention of 2.), which satisfies these 10 social concerns encoded by 35 USC SPL

¹⁶ This does not exclude, one inC of a GS(ET CI) embodies one or several concerns of this ET CI (or parts of it/them) – see the *DDR* example below.

¹⁷ reminds of another – pre-*Teva* already existing but by *Teva* amplified – truth: **Initial ET CI’s patent-eligibility testing as a coarse SPL satisfying filter is a legal error.** All experience shows that of a nontrivial ET CI often its facts (especially its extrinsic ones) initially cannot be found, but only by means of comparing it to prior art, i.e. when testing it for novelty & nonobviousness. Examples of such ET CI facts, practically impossible to recognize prior to comparing this ET CI to prior art, are provided by [6,7,11]. With such an ET CI it is impossible to recognize initially already the existence of these facts (especially those requiring extrinsic evidence), therefore initially applying this coarse patent-eligibility filter to it may discard it. Applying this initial coarse filter in particular contradicts *Teva* as it disables construing ET CI’s claim construction – which *Teva* requires to be construed, although this always has been required. I.e., this legal error again represents oversimplifying thinking⁹).

inCs' relations to data/crCs, namely their being in- or extrinsic and the implications thereof – is now conveyed by *Teva* as its key statement¹⁸⁾.

- A claim construction is extrinsic evidence based iff this applies to one of its crCs. As: In an ET CI's SPL test legal just as factual concerns are clearly nested.
- Construing an ET CI's claim construction means proving that all legally based and all on its facts based ET CI concerns are consistent with each other – they then establish ET CI's claim construction as a construction of ideas.

Remarkable thereby: This construction of ideas representing an ET CI alias its claim construction is – due to the scientification of SPL – of absolute resilience (as to its “semantic height” only for any given reference set of prior art documents).

Before showing that any/most ET CI/s offer/s several/many opportunities of finding an extrinsic fact for it/them, a short remark – elaborating on the preceding bullet points – is in place as to the quite practical impact of this principle of separation of concerns on both issues¹³⁾: This principle, applied to •)construing, for an ET CI, its claim construction yields requiring/prompting to execute the conjunction of the 10 FSTP-testo's of the FSTP-Test (see the next paragraph), and to •)performing its facts findings for these 10 FSTP-testo's yields requiring/prompting to provide, together with any testo's fact found also its in- or extrinsic evidence (as explained above) – and exactly this justification is subject to and implies *Teva*'s shift of power **A)**¹⁹⁾.

ALL occurrences of facts – potentially requiring support by extrinsic evidence – are easily identifiable by the two below “Standard Figures” of the FSTP-Project, FIGs 1/2, explained by their Legends. FIG 1 illustrates, why the passing of the FSTP-Test of FIG 2 is a necessary and sufficient condition for an ET CI to satisfy 35 USC §§ 101/102/103/112, i.e. the 10 ET CI/TT0 concerns [168,175,194,197,202]²⁰⁾.

¹⁸ Thus, for an ET CI, *Teva* – implicitly – considers compound concerns together with their disaggregation into logically equivalent conjunctions of elementary concerns (if existing), as required by *Mayo/Alice*, already. Therefore the resp. “concern disaggregation” induced by *Teva* is overlaying the *Mayo/Alice* inC and crC disaggregation, as now – additionally to their concerns of kind 3.) – the SPL concern of kind 2.), i.e. the 10 concerns, is/are taken care-of by the inCs/crCs. This is the reason why and how the inCs/crCs are tested by the 10 FSTP-testo's.

¹⁹ Independent of the Supreme Court's *Teva* decision [172], applying this principle of separation of concerns mostly generates redundancies, which are sources of utmost valuable insights, enabling e.g. detecting all kinds of errors¹⁴⁾ – not discussed, here. And these sources are vastly lost, if the principle of separation of concern is not meticulously obeyed when drafting and/or analyzing an ET CI. Yet, the FSTP-Test does obey it.

²⁰ Both FIGs show that testing an ET CI for satisfying SPL, in spite of its being full of intricacies, is an extremely stereotypic activity driven by always the same 10/12 SPL concerns, taken care of by the 10/12 FSTP-testo's

The FSTP-test1 is the *Mayo* test and normally comprises internally 3 SPL concerns (two of them caused by the normal need to disaggregate inCs), not just one as seen by the metaphoric view at it of the Supreme Court¹¹⁾ – i.e. if there is no compound inC, there is no need to disaggregate it, and consequently there are 10 SPL concerns. For the rest of this paper, the original number 10 of genuine concerns is used.

The 10 social concerns for any ET CI give rise to 12 different¹⁷⁾ kinds of facts findings for it, legally for all ET CIs being the same 12 different kinds of fact findings (individually potentially extrinsic) – and 10 if it comprises no compound inC²⁰⁾.

FIG 2 provides and the following list shows the increase of the number Z of justifications, i.e. of facts found to be qualified as in- or extrinsic, when testing an ET CI for satisfying SPL – here by the FSTP-Test during its execution. For:

- 1) (b) : N for the TT0-elements, and N for their compound inCs, $Z = 2*N$;
- (c) : K for their elementary inCs, $Z = 2*N+K$;
- (d) : N for their equivalent conjunctions, $Z = 3*N+K$;
- 2) : N+K for all inCs, $Z = 4*N+2*K$;
- 3) : K for the elementary inCs tested, $Z = 4*N+3*K$;
- 4) : no further facts findings comprised than those of 1);
- 5) : K for the elementary inCs tested, $Z = 4*N+4*K$;
- 6) : K for the elementary inCs tested, $Z = 4*N+5*K$;
- 7) : no further facts findings comprised than those of 1);
- 8) : no further facts findings comprised than those of 1);
- 9) : K for the elementary inCs tested in doc (“document.i”) peer to S, $Z = 4*N+(I+5)*K$;
- 10) : no further facts findings comprised than those of 1) and 9);

Two practical examples from the CAFC of how many fact findings inevitably must be performed in a CI's SPL test for making it absolutely resilient.

•)The *DDR* invention [156] represents the as to the *Teva* question simplest possible type of inventions, as it has $M=N=K=1$ and $I=0$ (as it is not tested for novelty or nonobviousness). Hence for it holds $Z=9$ – an SPL test with a smaller value of Z is impossible, for whatsoever ET CI. While in such simple cases sometimes several of the justifications collapse, one easily sees that mostly holds $Z \gg 1$, in particular due to test1(b), test 3, and test 9 in FIG 2. Moreover, in any such ET CI the number of all facts found is significantly larger than Z, as also easily seen – otherwise the ET CI at issue were trivial and hence not considered here.

•)An as to *Teva* less simple invention is the author's one [40,41], tested for novelty/ nonobviousness – and invalidated by a CAFC board for these reasons, insisting that all their facts are intrinsic – with $M=1$, $N=4$, $K>10$, and $I=4$. Hence for it holds $Z>16+9*10=106$, contradicting this CAFC board with its alleged $Z=0$.

Both examples show: For any nontrivial ET CI *Teva* offers the opportunity to present its claim construction such that it is based on several extrinsic facts.

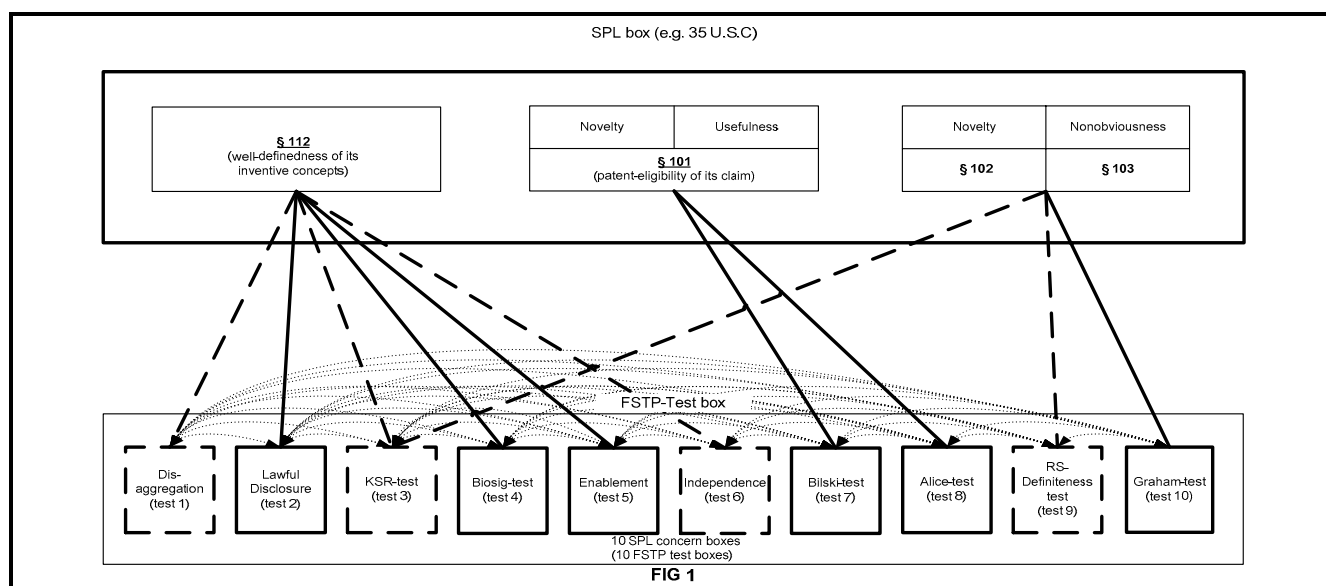


Figure 1. FIG 1 provides an outline of the philosophy carrying the FSTP-Test, shown and discussed by FIG 2.

Legend to FIG 1:

- 1) The SPL box, on top, shows the 4 Sections of 35 USC SPL, all requirements of which must be met by the ET CI under SPL test for satisfying SPL. They encode the society's 10 concerns as to granting temporary monopolies on inventions asap after their creations, thus incentivizing quickly publishing and economically leveraging on them.
- 2) The FSTP-Test box, at the bottom, shows these 10 SPL concerns of the society, legally encoded by the 4 SPL Sections' requirement statements (represented as tests): An ET CI satisfies all 4 Sections iff it passes all 10 tests.
- 3) Bold arrows show what only is tested of an ET CI by the classical claim construction, dashed arrows what must (and actually is) additionally tested of an ET CI by the refined claim construction for verifying the condition in 2), and the fine arrows what justifications – i.e. intrinsic or extrinsic evidence – the FSTP-Test indispensably requires.
- 4) All tests must be executed for the single “Generative Set, GS(ET CI)” alias S of inCs (after test1, but taking its indices into account) of this ET CI having a single interpretation “Technical Teaching 0, TT0” only (i.e.. $M=1$) – of which otherwise only a finite number exists (as the ET CI is of “Finite First Order Logic, FFOL”, see FIG.2), of which several TT0s or only one or none TT0 may satisfy SPL.

The FSTP ^{FFOLLIN} -Test is, for a given Finite First Order Logic Legal Invention Norm ("FFOLLIN"), a method for testing		
<ul style="list-style-type: none"> a given Emerging Technology Claimed Invention, ET CI^{FFOLLIN}, which has a single given interpretation TT0^{FFOLLIN}, which is represented by its given Generative Set, GS(TT0^{FFOLLIN}) ::= 		
$::= \{ \{ (X0n, \text{BAD-inC0n}^{\text{FFOLLIN}}) \mid 1 \leq n \leq N \} \cup \{ \text{BED-inC0kn}^{\text{FFOLLIN}} \mid 1 \leq n \leq N : \text{BAD-inC0n}^{\text{FFOLLIN}} = \bigwedge_{1 \leq k \leq K_n} \text{BED-inC0kn}^{\text{FFOLLIN}} \} \},$		
<ul style="list-style-type: none"> over RS ::= {TTi 1 ≤ i ≤ I}, whether TT0's GS(TT0^{FFOLLIN}) satisfies FFOLLIN, 		
whereby – for brevity in the sequel omitting the index "FFOLLIN" and abbreviating any FSTP-test.o by "o", 1 ≤ o ≤ 10 –		the FSTP-Test
during execution, after being started by its user, stepwise prompts it for inputting the given information, being		
<ul style="list-style-type: none"> ■ $\forall \text{TT0-elements } X0n, 1 \leq n \leq N \wedge \forall \text{BAD-inC0n}, 1 \leq n \leq N \wedge \forall \text{BED-inC0kn}, 1 \leq k \leq K_n, 1 \leq n \leq N, K ::= \sum_{1 \leq n \leq N} K_n;$ ■ if RS > 0: $\forall \text{TTi-elements } X^*0n, 1 \leq n \leq N \wedge \forall \text{BAD-inC}^*in, 1 \leq n \leq N \wedge \forall \text{BED-inC}^*ikn, 1 \leq k \leq K_n, 1 \leq n \leq N \forall 1 \leq i \leq I;$ ■ \forall justifications (provided by the resp. ET posc, where necessary by a resp. ET expert); 		
1)	(a) S ^{BAD} ::= { (X0n, BAD-crC0n) $\forall 1 \leq n \leq N$ }, and S ::= { BED-crC0kn $1 \leq n \leq N : \text{BAD-crC0n} = \bigwedge_{1 \leq k \leq K_n} \text{BED-crC0kn}$ };	
	(b) justof ^{f_v1 ≤ n ≤ N} :	X0n and BAD-crC0n is <u>definite and completely describe the TT0</u> ;
	(c) justof ^{f_v1 ≤ n ≤ N ^ $\forall 1 \leq k \leq K_n$} :	<u>Mayo-test passed</u> , i.e.
		BED-crC0kn is definite $\wedge \forall$ patent-noneligible BED ^o -crC0kn are identified;
	(d) justof ^{f_vS^{BAD}US} :	BAD-crC0n = $\bigwedge_{1 \leq k \leq K_n} \text{BED-crC0kn}$;
2)	justof ^{f_vS^{BAD}US} :	seS \wedge BAD-crC0n ∈ S ^{BAD} are <u>lawfully disclosed</u> ;
3)	justof ^{f_vS^{BAD}US} :	<u>KSR-test passed</u> S is well-defined over posc;
4)	justof ^{f_vS^{BAD}US} :	<u>Biosig-test passed</u> TT0 is definite;
5)	justof ^{f_vS^{BAD}US} :	<u>S-enabling-test passed</u> S implementability is lawfully disclosed;
6)	justof ^{f_vS^{BAD}US} :	<u>Independence-test passed</u> S is independent;
7)	justof ^{f_vS^{BAD}US} :	<u>Bilski-test passed</u> TT0 is non-preemptive;
8)	justof ^{f_vS^{BAD}US} :	<u>Alice-test passed</u> TT0 is patent-eligible;
9)	justof ^{f_vS^{BAD}US} :	<u>RS-Definiteness-test passed</u> RS is well-defined over posc \wedge TT0;
10)	justof ^{f_vS^{BAD}US} :	<u>Graham-test passed</u> TT0 is patentable.

Figure 2. FIG 2: The FSTP-Test, the passing of which is necessary and sufficient for an ET CI's TT0 to satisfy SPL

Legend to FIG 2:

Preamble: FFOLLIN stands for the SPL of any NPS, i.e. the FSTP-Test holds $\forall \text{NPS}$ – here for 35 USC §§ 101/102/103/112.

As outlined by FIG 1 and its Legend, the FSTP-Test comprises 10 FSTP-testo's checking a TT0 for satisfying SPL. This is the case iff TT0 meets all 10 social concerns encoded by FFOLLIN. All 10 concerns are met by TT0 iff GS(TT0) passes the 10 test.o basically representing these social concerns one-by-one. Nevertheless: Isolated testing whether TT0 meets a single social concern (e.g. patentability or patent eligibility or definiteness) is meaningless – as trivially follows from 4) below.

The FSTP-test1 summarizes the paradigm underlying and holding – resp. verified to hold by the test – during executing all 10 test.o's. It requires that all items input to the FSTP-Test for TTi are disclosed by doci (intrinsic facts) or, where necessary by a resp. ET expert (extrinsic facts), doc0 being the patent (application) under SPL test, doci some prior art document, i=0,1,2,...,I, and the "*" in identifiers of TTi items indicating that the resp. item need not exist and then is replaced by a dummy.

When getting familiar with the FSTP-Test one sees that it wants "preciseness questions" answered, in SPL precedents often dealt with in murky ways or ignored at all – i.e. it is slightly more restrictive than this SPL precedents, but the preciseness so achieved outweighs this increased rigor by e.g. guaranteeing increased robustness of patents granted.

This rigor implies that the semantics of the above quoted 6 Supreme Court decisions is slightly redistributed on the 10 FSTP-testo's.

Finally & once more: As of 4) in the Legend of FIG 1, for a CI the above FSTP-Test is to be executed for all TT0s of this CI.

- 1) The FSTP-test1 is the *Mayo* test, though refined – as often required for being meaningful, see [6,7] – by disaggregating TT0's BAD-inCs ("Binary Aggregated Disclosed") into equivalent logical conjunctions of BED-inCs ("Binary Elementary Disclosed").
- 2) The FSTP-test9 must in principle take for any prior art document.i/TTi, if there is any, peer steps to those taken for doc0/TT0 in test1. Practically, this may vastly be simplified [6,7].
- 3) The FSTP-Test – as its passing by an ET CI is a necessary and sufficient condition for its meeting all requirements stated by 35 USC SPL (in the latter's *MBA* interpretation by the Supreme Court) – enables identifying ALL intrinsic and extrinsic facts based "on ET CI's subject matter" modeled by crCs and involved in this test. While the FSTP-Test thereby tells nothing directly about how to find facts alias crCs of the ET CI under FSTP-Test, it yet greatly supports finding them ALL, by explicitly showing where exactly they are located in the test just as explaining the very specific question that must be answered by the very fact to be found there. As here

a specific ET question is at issue, this answer often cannot be provided without extrinsic evidence from this ET area provided by a resp. ET expert, making this fact an extrinsic one.

- 4) The FSTP-Test may be understood as an algorithm/program – what oversimplifies it. In truth, it is an “algorithm/program scheme” – so the AIT term – defining a FOL conjunction over S. As the communicative law holds in FOL, this conjunction’s factors may be arbitrarily swapped and hence also all tests in the FSTP-Test. This is fundamental for understanding the meaning of SPL!
- 5) The separation of concerns is not lost, just because these separated steps of finding facts alias crCs/inCs (see 3) above) – reflecting separating all concerns identified above – practically must usually be performed iteratively. Namely, only when testing the ET CI for its satisfying the SPL requirements one becomes aware of the tested ET CIs’ subtleties, as all experience shows.
- 6) A remark independent of *Teva* – due to SPL scientification: ■ An ET CI passing the FSTP-Test is legally unassailable, by logic reasons. ■ Its alleged infringement by or infringing an ET CI* is easily, exactly, and logically non-deniably determinable.

VI. *MBA/TEVA* – SUPPORT BY CAFC BOARDS, BUT THEY PRIMARILY COUNTER.

This Section shows the – in the CAFC still existing – antagonism between its true appreciation of the *MBA*-framework and now also *Teva* on the one side versus its lip-services as to applying these Supreme Court decisions on the other side.

To this end, it first evaluates by the *MBA*-framework the CAFC’s recent *LBC* decision [220] and *Teva* decision [213] – as done in [208] with its 5 earlier *Interval/DDR/Myriad/Biosig/Ariosa* decisions – before briefly commenting from the same point of view on the CAFC’s most recent *Cuozzo* [221], *Versata* [222], *Intellectual Ventures* [223] decisions (by time-out postponed to [225]). It ends by hinting at the impact on the public of such strange signals conveyed by the CAFC, elaborated on in Section VII.

The *LBC* decision [220]: This CAFC board applies – in its review of the District Court’s claim interpretation&construction – *Teva* straightforward and without any reservation. I.e., it shows the factfinding by the District Court is extrinsic evidence based, and it commits no clear error therein (see its opinion on page 14) nor a legal error elsewhere (p. 15-21). Hence this board reaffirms the District Court’s claim interpretation&construction basically on these grounds and *Teva*²¹⁾ (ignoring the infringement aspect of the opinion) – i.e. this decision is fully in line with *MBA/Teva*.

²¹ and by refraining from making *Teva* allegedly inapplicable to the *LBC* invention, as the latter may also easily (and erroneously) be found indefinite, by practicing the misinterpretation of the Supreme Court’s *Biosig* decision (see the following comment on this CAFC’s *Teva* decision).

The *Teva* decision [213]:

The contrary holds for this CAFC board – this decision diametrically contradicts *MBA/Teva*.

The reason is that by this decision the CAFC board does not take into account²²⁾ that the Supreme Court by its *Teva* decision considerably refined its pre-*Teva MBA* interpretation of 35 USC SPL, just as it did with *Biosig* and its pre-*Biosig Bilski/Mayo* interpretation of the US SPL (just as it did with *Mayo* and its pre-*Mayo Bilski/KSR* interpretation of the US SPL, and before with *Bilski* and the pre-*Bilski/KSR/Graham* interpretation of the US SPL, and before with *KSR* and the pre-*KSR Graham/...* interpretation of the US SPL).

As consequence, this CAFC board grossly misinterprets the Supreme Court’s *Teva* decision as well as its *Biosig* decision²³⁾. Before going into showing, by the paragraphs α)/β)/γ) below, these misinterpretations of the Supreme Court’s *Teva/Biosig* decisions by this CAFC board, it is worthwhile noticing what this board puts at stake.

By its *Teva* decision [213] this CAFC board unmistakably demonstrates that it in principle threatens all patents on ET CIs (fortunately erroneously and likely unintentionally). Namely: By these two (erroneous) applications of Supreme Court decisions, virtually any ET CI may be found to be indefinite – as just found to allegedly hold for the ET CIs of *Biosig* and *Teva*. This evidently would mean that the Supreme Court’s *Teva* decision is meaningless – just as most of its future SPL decisions about ET CIs, which it remands back to the CAFC – as its *Biosig* decision allegedly renders them indefinite, just because they are ET CIs, and thus allegedly neutralize *Teva*²⁴⁾.

ET CIs namely are plainly fictional [208], thus totally description depending – and nobody can exclude that a part of this description taken per se is ambiguous (what hence is forbidden by both, *Teva* and *Biosig*) and by the BRI is comprised by the ET CI (both resulting from the CAFC’s indeed, falsely interpreting *Teva* and *Biosig*).

After these context setting remarks, the digressiveness of this CAFC board’s interpretations of both these Supreme Court decisions – leading to these just shown bizarre implications – is now shown by α)/β)/γ). They state 3 clear requirements as to claim interpretation&construction¹³⁾ – which all 3 this board ignores/distorts, finally:

²² Except by lip service: Indeed, the Background section of the *Teva* opinion is an excellent summary of the immediately pertinent Supreme Court guide lines, while the Discussion section then is a drama as totally ignoring them – as shown next – and thus permanently falling back into the non-refined, i.e. pre-*MBA/Teva*, and hence no longer admissible interpretation of US SPL²⁴⁾.

²³ The CAFC committed both errors already in its *Biosig* decision, as briefly shown in [208] – and here now proven in detail.

²⁴ As by the dissenting opinion of this CAFC board decision already correctly criticized, see there in particular the last sentence of its Section I.

- α) As to claim interpretation¹³⁾, the Supreme Court's *Teva* decision states the requirement²⁵⁾: Where the District Court needs to consult extrinsic evidence as to subsidiary facts in dispute "*The district judge, after deciding the factual dispute, The appellate court can still review the district court's ultimate construction of the claim de novo. But to overturn the judge's resolution of an underlying factual dispute, the Court of Appeal must find that the judge, in suspect to those factual findings, has made a clear error. FRCP 52(a)(6)*" – not a "scientific error".

I.e.: The CAFC must not overturn the District Court's disputed extrinsic factfindings without a clear error therein – what its *Teva* decision evidently does, trying to present the district judge's decision as to the factual dispute at issue as a scientific decision not a legal one. But, a judge's official decision always is a legal one.

- β) As to claim interpretation¹³⁾, the Supreme Court by *Biosig* implicitly addresses the BRI and requires it must not be used as lacking the precision § 112.2 demands, by stating: "*It cannot be sufficient that a court can ascribe some meaning to a patent's claims; the definiteness inquiry trains on the understanding of ... at the time of the patent application, not that of a court viewing matters post hoc*".

The CAFC's *Teva* decision does exactly, what *Biosig* thus forbids: It *ascribes some meaning to Teva's claim 1*, as resulting from *a court viewing matters post hoc*.

- γ) As to claim construction¹³⁾, the Supreme Court by *Biosig* provides a two part definition of "definiteness" of an invention, both (below underlined) parts of which an ET

²⁵ deriving its merits from the totally novel being of ET CIs (see Section III). Thus, there are very good reasons for understanding the dissenting opinion as to a strict FRCP 52 analogy, as there this phenomenology or ET CIs is hardly encountered.

But, due to this ET CIs' phenomenology indeed vastly being of a new kind of its own – as such not recognized by the patent community, but felt by the Supreme Court and expressed by its 6 decisions in *KSR/Bilski/Mayo/Myriad/Biosig/Alice*¹¹⁾ – it evidently managed to create confusion in the US NPS to an extent seriously threatening considerable but indispensable investment activities into long-term high-risk ET R&D, on which the US society is depending. Reacting on these two legal problems – the dealing of SPL with a quite different phenomenology than that of CTs, and the reluctance of the patent community to get aware of this – the majority decision in *Teva* is definitely limited to defining the new legal meaning of the term "factfinding under SPL": to being the specific factfinding required for preserving the applicability of the SPL to ET CIs (often being significantly more complex, due to the ET CIs' phenomenology, than the FRCP 52 factfinding, as explained in detail in Section V).

Focusing, in this reaction, on factfinding is reasonable, as it are these ET facts that represent – at least come close to representing – the ET CIs' requirements to be met by the notional refinement of the interpretation by the Supreme Court of 35 USC §§ 101/102/103/112, for preserving the applicability of 35 USC SPL to ET CIs and catering this new ET CIs' phenomenology needs. And this holds also for preserving the consistence between 35 USC SPL and FCRP 52. Whether this is policy considerations driven or not is immaterial, in this reaction (dissenting opinion on p. 15).

Yet, there is also another legal problem brought up by ET CIs, testing them by District Courts for their satisfying SPL, and thereby not being able to review their factual findings by the CAFC (unless the District Court committed a clear error). This problem was presented to the Supreme Court as a Petition for Certiorari by J. Duffy and J. Dabney long before its *Teva* decision and not granted by it [224] – not elaborated on, here, as hitherto broadly considered as being immaterial, seemingly.

CI must meet for being definite: "[W]e hold that a patent is invalid for indefiniteness if its claims, read in the light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention."

The CAFC's *Teva* decision provides only some lip service to this Supreme Court decision by totally focusing on its completely noncontroversial first part²⁶⁾ and completely ignoring its second part, which – for the established non-refined SPL semantics and nontrivial ET CIs – may be impossible to verify, if first this ET CI's scope is to define. Anyway, as a consequence of totally ignoring its second – by no means trivial to meet – part, this *Teva* decision evidently does not meet this *Biosig* requirement either.

The Supreme Court's claim interpretation&construction requirements α)/β)/γ) are independent of each other. Thus, any one of them, if failed, renders the CAFC's *Teva* decision as legally erroneous, even 3-fold. Thus *Teva* is legally 3-fold obsolete.

Finally, this board's *Teva* decision has a clear perspective. [208] already stated that the CAFC's *Biosig* decision [205] – as *Myriad* already indicated and its last days' decisions now confirm – tries to develop a simpler *MBA* interpretation (than the by the Supreme Court evidently conveyed one), which unfortunately is hopelessly oversimplified, just as the by today commonly known BRI oversimplification/absurdity.

Out of these 10 post-*MBA* CAFC decisions of above or of [208,225], i.e. out of *Interval/DDR/Myriad/Biosig/Ariosal/LBC/Teva/Cuozzo/Versata/IntellectualVenture*, 3 ones postponed to [225] – only 2 are clearly consistent to *MBA*-framework/*Teva*, the other 8 are inconsistent and hence incomprehensible/confusing. Since years, no reconciliation trend is recognizable, but more and more uncertainties about the CAFC are building up. Such signals' likely impact on the public is that it will readily welcome and try out the unexpected chances provided by *Teva* – outlined by Section VII.

VII. TEVA'S IMPACTS ON THE SPL DEVELOPMENT – IN THE US & ABROAD.

Although *Teva* primarily deals with an SPL precedents management issue and not with SPL per se, this Supreme Court decision will likely exert massive impacts on the SPL development, in the US and abroad. The reason for this expectation is that, as to the development of SPL, the emerging *Teva* launched process of reorganization of the management of the SPL precedents development in the US coincides and concurs – indeed: perfectly complements – the

²⁶ It namely today is a commonplace that patents' specifications never can be of absolute preciseness, just as this is true for any statement, even in Mathematics!! As most patent practitioners never before heard this truth – not at all being a triviality but an insight achieved by Analytic Philosophy only in the 20th century's first half – it was extremely reasonable to the Supreme Court's *Biosig* decision, to convey it eventually to this crowd, from where it now made it into some boards of the CAFC: Just to take it, but not to overinterpret it as recently permanently done (see also *Ariosal*!).

up-coming processes triggered by the *MBA*-framework based scientification of SPL (*MBA* = *Mayo/Biosig/Alice*).

First to the US impacts by *Teva*: This Supreme Court decision effectively

- redistributes between the District Courts and the CAFC the authority for a part of claim interpretation¹³⁾, for ET CIs often being dispositive, i.e. result determinative: It ends the CAFC's capability to overrule, using a "*de novo*" standard (p. 1), District Courts' factfindings although these comprise no "clear error".
- unfolds, at the District Courts – engaged in patent law cases or now going to further qualify for them – their courage to and speed in adapting their SPL precedents to the Supreme Court's *MBA*-framework, thus also unfolding between them the principle of competition, known to catalyze productivity. Thus, their total speed of progress in this adaptation process will, with all likelihood, vastly exceed the speed hitherto achieved by the CAFC therein (see Section VI).
- expects that there is no real risk that the so created accelerating momentum in further developing SPL precedents would cause an unacceptably large number of inconsistent such adaptations to the *MBA*-framework. The Supreme Court clearly qualifies this residual risk as marginal, by noting that "... *subsidiary factfinding is unlikely to loom large* ..." (p. 10) – and in particular by repeatedly emphasizing the sweeping concept that the CAFC "... *will continue to review de novo the district courts' ultimate interpretation of the patent claims*" (p. 9, e.g.) that it would welcome if the CAFC reduced such unwanted diversity, when appropriate.

And there is a second heavy-weight reason, why this risk indeed hardly exists: The now mature *MBA*-framework based SPL scientification meets the ET CIs' needs and excludes principal diversity in the *MBA*-framework based SPL interpretation. Thus, that nightmare is over, and the District Courts surely don't wish it back. Hence they would from the outset avoid today's principal diversity in their precedents about ET CI, as it still is plaguing the CAFC – see Section VI – by taking as such precedents' common denominator the so scientized SPL interpretation²³⁾.

Teva's international impact – via the just outlined US impact of *Teva* on SPL – is even simpler to predict. It is commonly known that in particular India and China are eager to get into the, for them, economically very appealing patent business. Both nations know that on the profitable markets of the future IPRs are of greatest importance, are anyway in fond of these markets' activities controlling "applied sciences" – one of which SPL in the US just has become by its *MBA*-framework based scientification – and they have the human resources to take on successfully and

with all intensity this brand-new nontrivial SPL science/technology²⁷⁾ [182].

All international experience tells: India won't move before the US does, but with all its potentials as soon as the US moves – and that the same holds for China, except that its NPS is already much further developed, hence not necessarily waiting until the US NPS reasonably reacts on the SPL impulses its Supreme Court issued.

This international prediction is as simple as that, and yet it means an SPL landslide²³⁾ for the rest of the world, too, including Europe.

Nevertheless, a disclaimer is in place: Due to his specific scientific qualification the author has no idea of market research in IPR markets, solely some historic knowledge and

²⁷ Evidently, here the question arises, why the *MBA*-framework based SPL scientification shouldn't encounter the same disaster that earlier murky areas' scientification had to face – e.g. the scientification of communications technology area. It suffered, by the end of the 70s, from very controversial network architectures, in particular IBM's "System Network Architecture (SNA)" against all other inconsistent ones. This area's scientification was partially achieved by the OSI-Reference Model (OSI = Open Systems Interconnections), even supported by all international giants in communications technology, in particular the leading ISO (= International Standards Organization), the ITU-T (International Transport Union – Telecommunication), IEEE (= Institute of Electrical and Electronics Engineering). While the OSI Reference Model was and still is recognized by Academia worldwide to be the sole piece of scientification of communications technology, it never became broadly popular and by today virtually completely disappeared from any one of the many communications business areas.

The *MBA*-framework based SPL scientification is in a quite different situation. First of all, SPL is not that tremendously voluminous as communications technology, implying that the OSI-Reference Model ("OSI-RM")

- is incomplete whereas the scientification of *MBA* and with it of SPL is complete, therefore
- does not suffice for developing practically OSI-RM based useful communications technology, whereas *MBA*-framework based SPL technology is on the way [198], implying that
- impacted on the community of communications technology professional only like a flash in the pan, whereas the *MBA*-framework based SPL technology will dramatically change any patent practitioners everyday professional life, as mostly multiplying its productivity by a significant factor, up to an order of more than 10 for PTO's examiners.

Independently of these predominantly everyday's operational advantages of this *MBA*-framework based SPL scientification: As to its expectations of being broadly accepted by its market segments it is in a 3-fold superior position compared to the OSI-RM – also being fascinating as representing many fundamental insights into the working of communications of any kind, natural as well as technical ones – all three grounds of this superiority being due to very unusual aspects of its mission. These unusual aspects of this new science/technology enable

- first of all, dealing with the very topical issue of innovation and the related IPRs on a hitherto unavailable and much higher level of development – thus opening to anybody familiar with it excellent professional perspectives; the same applying to law firms, R&D departments, ...,
- the community of R&D investors to dramatically improve the hedging of their investments by patents – to an extent hitherto unthinkable, and
- finally, every judge, lawyer, examiner applying it to enjoy the appealing charm – and to beam with it – of quite directly being blessed by the Constitution, the Congress, and the Supreme Court, what to this degree hitherto is impossible, in most other professional areas anyway.

In total, it is unlikely that the *MBA*-framework based SPL scientification will share the fate of Maria Stuart: To be beautiful but unfortunate.

international/political experience – enabling him only to painting with a broad brush. The elaborations of this Section VII therefore are highly speculative, representing nothing but his feelings – being imaginative, at best, nothing else.

Yet, should this prediction fail, this had no impact on this FSTP-science/technology or the interest in it by the community of innovation scientists/managers/...²³⁾.

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