

The Innovation Expert System ('IES') & its FSTP-Test. – A Disruptive Innovation of Patent Business by AI –

In any Emerging Technology, its Claimed Inventions ('ETCIs') may socioeconomically threaten its patent system by their potential '**applications clustering**' alias '**unlimited preemptivity**'. In favor of ETCI inventors & investors, the US Supreme Court eliminated this risk by notionally refining the classic Substantive Patent Law ('SPL') by its 6 unanimous SPL-framework decisions. As it first scientifies & then mathematizes ('**fstm**') all ETCIs of all national SPLs, its international break through is foreseeable.

This fstm is caused by the "Facts Screening/Transforming/Presenting, **FSTP**"-Test. When used in an IES, it dramatically increases the efficiency & quality of drafting/patenting/testing/analyzing ETCIs. This comprises, for a patent (to be) granted on an ETCI, •the "**enforceability of its patent-eligibility & patentability, PE & PA**" in the USPTO and in US courts, •having drafted it "**totally SPL-robust**", •testing it for (not) being totally SPL-robust, and •identifying and drafting sets of still unknown related ETCIs.

For **any** ETCI on any IES, the FSTP-Test enables by its **AI for I) & II)** to **semi-** resp. **fully-automatically**:

- I) calibrate the FSTP-Test with any ETCI's claim interpretation ('**CI**'): By inputting the patent's ETCI into the IES by — as **prompted by it** — **all** marked-up specifications of this ETCI's items; & then
- II) test by the ETCI's claim construction ('**CC**') its satisfying SPL: By in **real-time** computing & outputting the correct '**Legal Argument Chain, LAC**', as **reply to an SPL enquiry detected by the IES**.

1

The IES & the AI of its semi-/fully-automatic FSTP-Test thus incredibly improve the quality & efficiency of testing any ETCI for its 'total SPL robustness' — for any national PTO & court & ETCIs' inventors/ investors/ patentees/ lawyers/ examiners/ judges/ All of them hitherto thinking this were impossible.

This brochure shows FSTPtech's amazing patenting power in all areas of Emerging Technologies & their ETCIs, esp. ^{BIO}ETCIs.

FSTPtech is cutting edge AI, i.e. deterministic rigorous Mathematics. It moreover may indicate all innovativity adjacent to a given ETCI.

I.e.: FSTP-Technology is the Mathematical Physics of Innovation. It will prevail the emerging Innovation Age. It tolerates no vagueness, the unavoidable misery in notionally non-refined SPL.

Nothing like this groundbreaking FSTPtech exists today in patenting/innovation business. It is unique, worldwide.

Prof. Dr.-Ing. Sigram Schindler*



* For my CV see the end of this brochure.



2

FIG. 1: Some Areas of Subject Matter of ETCIs — nevertheless Comprising also CTCIs

I. FSTPtech: A Notional Refinement- & AI-Driven Innovation Technology.

- I.1 The IES and its FSTPtech take the kernel of any patent/invention/innovation^{1.a)} business — its SPL — from its currently still ‘manufacture’ to the ‘post-industrial’ level of development.
- I.2 They together unfold a much higher quality & efficiency of/in inventing & patenting – indispensable for any ETCl driven enterprise for incentivizing and protecting by SPL its human resources’ interests and financial investments – than possible in the notionally outdated factual thinking of classic SPL interpretation. Especially: The latter disables ETCl’s totally robust SPL protection & non-threatening of SPL.
- I.3 The US Supreme Court fixed these problems — with the classic interpretation of 35 USC §§ 101/102/103/112 — by its **SPL framework**^{b)}: In favor of ETCl inventors & investors, it implicitly but indispensably requires notionally specifying & refining ETCl’s patent specifications by “inventive concepts”^{c)}.
- I.4 The Supreme Court’s framework turned out, by the FSTP-Test, to be amenable to scientification of ETCl’s and their SPL satisfaction. As both are of “Finite First Order Logic, FFOL”, the logic inherent to their AI is extremely simple and enables representing ETCl’s and their FSTP-Test even mathematically.
- I.5 Two examples indicate how to leverage on an ETCl’s legal & factual scientification/mathematization.
- Calibrating the IES by an ETCl enables the IES’s FSTP-Test to fully automatically prompt the IES user to input all ETCl items, thus enabling the IES to check whether they are ‘rational’^{2.a)}, thus greatly facilitating stating/double-checking the ETCl’s CI meeting the § 112 requirements.
 - The IES then may (semi- & mostly fully-automatically) execute the FSTP-Test and output **ANY** such by the FSTP-Test determined **EXACT** information^{d)} about its CC meeting the requirements of §§ 101,102,103 – in response to keywords that the IES detects, spoken or input by its user(s).
- I.6 Thus, FSTPtech unfolds striking quality & productivity and, first of all, enables drafting for any ETCl a totally robust patent — a scientific achievement hitherto unimaginable by the patent community^{e)}.

3

^{1.a} This brochure deals with inventions & innovations based on R&D. Inventions are not really groundbreaking, but ordinary creations for which the patent law has primarily been developed. Innovations are assumed to be groundbreaking to a degree that they are disruptive and initially hard to fully understand. For both the US Supreme Court recognized that — if they are ETCl’s, i.e. Emerging Technology based — robustly protecting them by SPL requires its classic interpretation to be notionally significantly refined. I.e., any ETCl patent granted by classic SPL interpretation is in jeopardy, due to its ETCl then potentially being totally preemptive (see Section IX).

^b by its Solomonic decisions in *KSR/Bilski/Mayo/Myriad/Biosig/Alice*, which especially tie ETCl’s to their applications (see Section IV).
For the EPC — its international community is significantly larger than the EU’s one — its SPL is based on §§ 52-57 & 69 & 82-84 (and the G 03/08), in its ‘National Patent Systems, **NPSes**’ hold analoga.

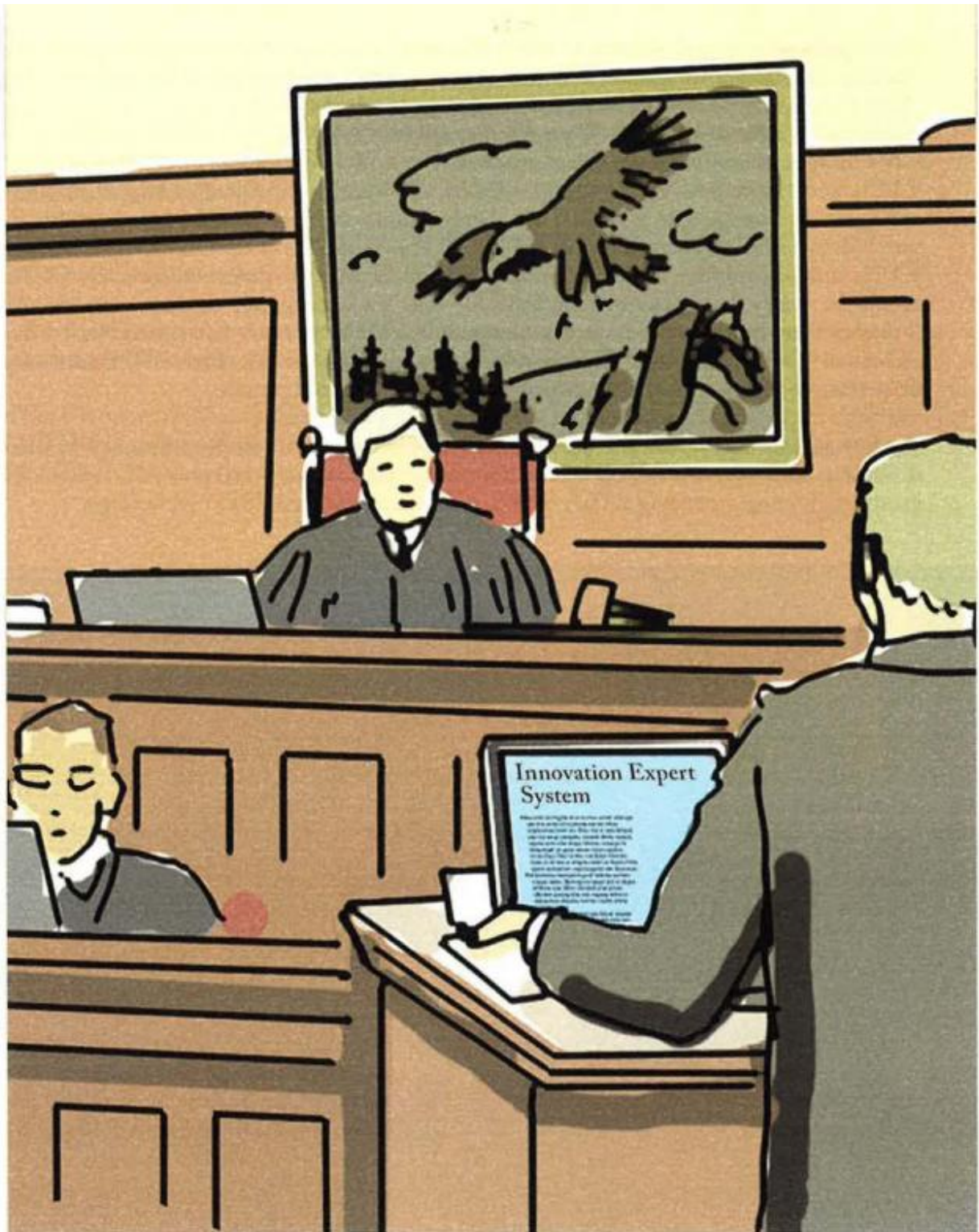
^c This refinement of inCs — its indispensability is known from Mathematics for defining ‘independence’ of elements — enables drafting ETCl patents ‘totally robust’, as thus refined inCs alias **‘elementary inCs’** are capable of meeting all framework-based SPL requirements (often impossible for compound inCs). Factually, any E-inC must represent, by Platon’s thought^{2.b)}, a **“single idea”** only⁵⁰⁸.

^d – dynamically configured and output as string of graphical symbols, or as sentence in the simple **‘Invention/Innovation Specification Language, ISL’**, e.g. as **‘Legal Argument Chains, LACs’** in trivialized natural English language.

An IES output – be it a preceding input or e.g. whether a given ETCl actually does pass the FSTP-Test – is often finally to be confirmed by an examiner or court. As the IES’s correct working would be approved by every competent authority, this examiner or judge would for this final confirmation only take some representative samples, but would meticulously check this ETCl’s factual information for having been correctly input to the FSTP-Test during its calibration.

I.e., the IES is factually and legally an exact analogon to what is known from ERP-systems, e.g. the one by SAP.

^e This paper addresses ETCl inventors, patent investors, and esp. the new ‘Director’s AI Partnership Blog’ — as by Laura Peter invited.



4

FIG. 2: The Use of an FSTPtech IES in a District Court

II. ISL Facilitates Any ETCI's Notional Refining.

II.1 The main purpose of the FSTP-Test is to check an ETCI — also in a court room — whether it meets all SPL requirements stated by the Supreme Court, i.e. for its being definite,, PE, PA. To this end it explicitly requires (e.g. in its *Mayo & Alice* decisions) first of all to define an ETCI's 'inventive concepts', being pairs of a <factual creative concept, legal concept> and its COM(ETCI), see Sections **IV & V & V.6**.

II.2 In FSTPtech, ETCIs are specified in a trivial subset of natural English expanded by a few SPL notions, called ISL^{1.d)}, by specifying basically their factual creative concepts. Since the 80s these are internationally the sole basis of IT systems' specification techniques. In its reinterpretation of 35 USC/SPL, the Supreme Court implicitly but indispensably requires to use to this end this broadly known notion of "(creative) **concept**" for specifying an ETCI such that this specification meets the requirements stated by § 112 — due to this notion being self-explaining for the large crowd of 'IT-savvies'.

II.3 ISL has the advantage to be layer-independent, thus greatly facilitating structuring an ETCI specification into its most natural hierarchical notional layers, the O-/A-/E-layers of sets of O-/A-/E-concepts — see **IV & V**.

II.4 The Supreme Court implicitly requires this notional refinement of ETCIs' specifications for enabling inventors & investors of ETCIs to unfold their embodied enormous beneficial potentials without risking that the patents allegedly protecting them are invalidated by courts. For an ETCI, its original by its patent provided 'O-granularity' of nonrefined notions often is too coarse for establishing consistency & hence predictability in SPL precedents about ETCIs. I.e.: This classic notional 'O-resolution/granularity' is for many ETCIs not subtle enough for guaranteeing that two different, allegedly correct determinations of one of its properties (e.g. its definiteness or patent eligibility or nonobviousness) would not deliver contradicting results — as pragmatically proven by many CAFC decisions.

II.5 Finally, ISL has another outstanding practical advantage: Its semantic enables abstracting from intricacies hitherto not encountered in 'Classic Technology', i.e. in CTCIs. By contrast to them, ETCIs always are partly intangible/invisible/fictional, i.e. to some degree metaphysical, and insofar vastly based on purely intellectual models. This may cause serious booby-traps, as in testing the *Myriad*^{BIO}ETCI (s. **IV**): By its O-specification it may be deemed as not comprising an application, yet its refinement to an E-specification shows that it necessarily implies an a priori known '**rudimentary application functionality, RAF**' that mutates (hitherto not known to be used for recognizing *Myriad*'s invention) to an E-crC — thus rendering *Myriad*^{BIO}ETCI as PE. I.e.: Such intricacies often disappear by notionally refining thinking about ETCIs.

II.6 Thus, for consistency & predictability in SPL precedents about ETCIs, their notional refinement is indispensable — as by the Supreme Court required and meanwhile is shown to be scientifically and even mathematically utmost feasible — especially if an ETCI's claim construction is to be fully automatically executed.

III. ETCIs Patenting by FSTPtech: For Examiners, Inventors, ...

III.1 For the USPTO the advent of ETCIs implies not only a growing annual number of new patent applications of increasing complexity and/or sophistication, but also the US society's urgent need that the examiners are open, technically fit, and speedy – for thus optimally facilitating to unfold, together with the ETCIs' inventors, the ETCIs' economic potentials. This objective is by the USPTO only achievable by its use of the amazingly powerful FSTP-Technology — presented by what follows:

III.2 Without creating any cost, the USPTO in this case could motivate any such applicant – e.g. by granting him/her a prioritized examination – to submit, together with his/her patent application for an ETCI, a basically uniform 'Pair of this ETCI's Teaching and a Reference set of its prior art Data Structure, PTR-DS'. It would comprise of the applied patent • a marked-up specification disclosing this ETCI's refined claim interpretation, as well as • a Reference set of analogously marked-up prior art documents, $1 \leq i \leq I$.

III.3 I.e.: The applicant generates this PTR-DS by means of an IES, approved by an approved auditor. It confirms that its IES meets the USPTO's SPL requirements (in line with the Supreme Court's SPL framework), i.e. that the ETCI of the PTR-DS is patentable over its RS, rationally resp. mathematically proven. The examiner then only needs to check — automatically, by means of the USPTO's IES and its FSTP-Test — that the applicant's ETCI passes the latter and hence is patentable over its RS.

III.4 Thus, FSTP-Technology enables the USPTO to reverse the burden of proving the non-existence of legal and/or factual reasons comprised by the PTR-DS, which would render its ETCI over posc non-patent-eligible and over additionally RS non-patentable. This reversal of the burden of proof would at least quadruple an examiner's throughput of patent examinations – and improve the quality of this examination to 'rational resp. total robustness', as explained next.

- Delivering and grasping this so dramatically improved service provided by the USPTO to its customers – by its having upfront conveyed to them such "structural" & "strategic" information about how to draft the patent application for an ETCI — may further going be greatly facilitated by using the IES over the Internet in dialog mode also for communications between an ETCI's inventor and the USPTO's examiner before submitting the patent application for this ETCI and/or while it is being examined. This cooperation of the USPTO would require no additional real effort by it, except that the examiner initially had to learn ISL. But, it would greatly facilitate creating trust among the patent community in the USPTO — and better: It would greatly facilitate qualifying and stimulating the inventor community for accelerating creating ETCIs, especially if they are innovations.

..., Investors, Lawyers, Licensees/-sors, R&D Managers & Judges.

- Any frequent user of the FSTP-Test by its IES implementation automatically and inevitably gets a deep SPL qualification, due to any ETCI's total independency of the FSTP-AI: It namely is the common logic backbone of any ETCI's stereotypic FSTP-Test, while any ETCI's specifics are represented by its set "**Combination of its ETCI-elements**(properties), **COM(ETCI)**", by the Supreme Court's *Alice* defined.

Thus, achieving this SPL qualification is guaranteed by the IES, especially to any such USPTO examiner. The IES namely permanently and automatically repeats — wherever its FSTP-Test's execution on an ETCI has actually arrived — one of the few FSTP-AI enquiries to the latter about its COM(ETCI), of which the FSTP-Test needs to know the answer for replying to this inquiry.

In total, this way of repeatedly confronting this frequent user with the same small set of FSTP-Test inquiries and replying to them for a broad variety of COM(ETCI)s, does work like a kind of frequently repeated multiple-choice test of him/her.

- Especially as to ^{BIO}ETCIs, the above burden of proof reversal — enabled by the AI based FSTP-Technology — hitherto impossible, is without alternative. Due to the ETCIs' accelerating increase of sophisticated e.g. ^{BIO}scientific knowledge that they embody, it is absolutely unthinkable that the USPTO's human resources would be able to qualitatively keep up with it. This is the case already today, as evidenced by the last years' many untenable PE-decisions of the PTAB about ^{BIO}ETCIs, and worse: By the USPTO's — just as any other PTO's — for ^{BIO}ETCIs vastly incomplete & very deficient § 112 guidelines^[495,508].
- By FSTPtech, the rate of non-rejectable patent applications would thus quickly get very close to 100% — also if based on high quality prior art search. This were manifold utmost desirable, as:
 - Patents and already their applications were totally robust — today at least legally, very soon also factually — thus saving time and accelerates granting patents.
 - Courts' SPL precedents about ETCIs would be reliably predictable, in so far optimizing inventors' & investors' incentivitation to invest their resources in developing them.

III.5 As to examining patent applications, this change of mode of operation of a PTO were nothing else but making it behave the same way as a building supervisory authority: The latter would not even dream of determining on its own, whether an application for approval of construing a building is solid – but it would a priori expect this mathematical construction proof to be provided by the building's owner to the building supervisory authority. It then would just check and confirm or not this proof submitted, and accordingly grant the right to erect/use this building or refuse it. The massive rush in building construction business then would expand to all ETCI creation business.

IV. Specification of a ^{BIO}ETCI Example & the FSTP-Test.

The specifications in Boxes1-3 are represented in ^{DNA}ISL-KR \subseteq ^{BIO}ISL-KR^{2.a)} — for details see^[495,508].

Myriad-^{BIO}ETCI^{1/7} is specified by $COM(mratETCI) ::= \{ O-crC0n ::= mphysO-MUIS0n, 1 \leq n \leq N, \text{ identifying TT0 by E-crC0S and its E-xcrC0S} \}$

$\cup \{ A-crC0n, 1 \leq n \leq N \}$ [superfluous for ^{BIO}ETCIs^[488]]

$\cup E-crC0S^{mrat} ::= \{ E-crC0k \vee E-nrcC0k ::= k\text{-ISL-sentences, disclosed by } E\text{-}mratMUIS0k, 1 \leq k \leq K \}$, having

N ::= 3 ETCI-elements: **X1** ::= Tissue_of_testee (TT), **X2** ::= Wildtype-info (WT),

X3 ::= Application (APP), with **K** ::= 8 E-properties, abbreviated by E-crCk ::= ek, i.e.:

$ratEcrC0S ::= \{ (e1, 1 = e1) ::= T(issue)ofT(estate)G(ene)S(equence)o(f)B(RCA)1g(ene) \bullet$

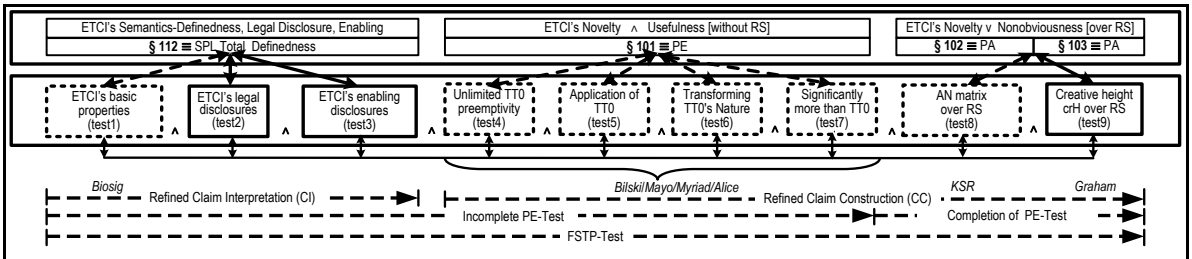
$(e1, 2 = e2) ::= TTGS0B1R \bullet (e1, 3 = e3) ::= TTGS0B1c \bullet$

$(e2, 1 = e4) ::= WTGS0B1g \bullet (e2, 2 = e5) ::= WTGS0B1R \bullet (e2, 3 = e6) ::= WTGS0B1c \bullet$

$(e3, 1 = e7) ::= diff(e1, e4) \vee diff(e2, e5) \vee diff(e3, e6) \bullet$ [resp.]

$(e3, 2 = e8) ::= \exists allele(TTGS0B1g \vee WTGS0B1g \& \exists \text{ hybrid}(probeGS0B1g \& \exists \text{ DNA} \subset TTGS0B1g)) \bullet$]}

Box1: Myriad's ^{BIO}ETCI^{1/7} ::= COM(mrat^{BIO}ETCI) is represented in O/AE-KR^[355] to be PE-tested. The 1/7 are claim numbers in the former Myriad patent. In ^{rat}EcrC0S, its 'e's' expressions in bold/normal letters are ^{DNA}ISL-terms resp. ETCI-specific^[508]. Their metamorphosis from mrat to rat is here skipped. The bold line boxes represent the Xn's, the bold lines between them their 'interconnections', which may interconnect of the resp. box a specific ek (if the bold line crosses its bold border line and points at an ek) or an expression of one or several of the boxes' ek's (if it stops at the border line). Thus the graphic KR of the Myriad-ETCI provides information about the latter, not comprised by its ^{rat}EcrC0S. If e8 is present (= claim7), then Myriad-^{DNA}ETCI is PE, otherwise (= claim1) is "PE as e7 is not bi of e1-e6. If the graphic KR were to be avoided, ^{DNA}ISL-KR could also specify its semantics, as both enlightenment philosophers' ethics consideration — see fn^{2.c)} on p. 10.



Box2: In this graph the dashed lines indicate the notional framework refinement of the solid lines' notions of the pre-Mayo SPL interpretation. Its top 3 boxes show the 35 USC/SPL and its socioeconomic concerns. I.e.: They quote the ^{mrat}sections²⁾ of SPL, and the line above the latter one states the political ^{mphys}concerns of socioeconomic that politically carry the SPL and that is politically threatened by totally exemptive ETCIs — as the Supreme Court correctly recognized, especially in *Mayo/Alice*. Its middle 9 boxes are the tests of the elementary properties of the ETCI-element combination already addressed by the Supreme Court framework decisions quoted below these boxes. The 7(9) PE requirements stated by 35 USC §§ 112/101(102/103) are — from left to right — mapped on to the 7(9) tests checking them (see Boxes3).

(Meta)rational Claim Interpretation, ^{mrat}CI: <external input ::= ^{mrat}CI in ISL, internal output ::= a COM(^{mrat}ETCI)> & begin:

- 1) if [COM(ETCI) is factually E-complete \wedge correct \wedge definite \wedge [O-crC0n = \wedge $1 \leq k \leq K_n$ (E-crC0k \vee E-nrcC0k), $\forall 1 \leq n \leq N$] \wedge $\Sigma 1 \leq n \leq N$ K_n=K] then go on;
- 2) if [!(O-inC0n, E-inC0k_n) $\forall 1 \leq n \leq N \wedge 1 \leq k_n \leq K_n$] are ex- or implicitly lawfully disclosed] then go on;
- 3) if [O-crC0n is ex- or implicitly enablingly disclosed, $\forall 1 \leq n \leq N$] then output ^{mrat}E-crCS = COM(^{mrat}ETCI) & stop.

(Meta)rational Claim Construction, ^{(m)rat}CC: <internal input ::= COM(^{mrat}ETCI), external output ::= COM(^{rat}ETCI)> & begin:

- 4) if [COM(^{mrat}ETCI) is ^{mrat}directed to an exceptional concept', i.e. ^{rat}comprises in the "PE TT0 an E-xcrC'] then go on;
- 5) if [COM(^{mrat}ETCI) has ^{mrat}'an application of ...', i.e. ^{rat}'an application that uses a TT0 without modifying it'] then go on;
- 6) if [COM(^{mrat}ETCI) is ^{mrat}'transforming the nature of the claim', i.e. ^{rat}'transforming the "PE claim of TT0 into the PE ETCI'] then go on;
- 7) if [COM(^{mrat}ETCI) is ^{mrat}'significantly more than ...', i.e. ^{rat}'E-crCS^{ETCI}TT0 basically independent of E-crCS^{TT0}!] input COM(RS^{mrat}) and go on;
- 8) if [COM(^{mrat}ETCI) has a ^{rat}'definable A/N-Matrix over RS] then go on;
- 9) if [COM(^{mrat}ETCI) has a ^{rat}'non-cherry-picking creative height, crH ≥ 2] then output 'COM(ETCI)^{rat} is PA' & stop;

Mathematical Claim Construction, ^{mat}CC: <internal input ::= COM(^{rat}ETCI), external output ::= COM(^{mat}ETCI)> & begin:

- 4') if [E-xcrCS^{TT0} \neq Φ^*] then go on;
- 5') if [([TT0scope(E-crCS^{ETCI}) \subseteq scope(E-crCS^{TT0}) \wedge ((\exists E-crC^o \in ETCI^{TT0}) \wedge (\exists E-crC^{oo} \in TT0)) : E-crC^o | E-crC^{oo})] then go on;
- 6') if [(\exists E-crC^{*} \in E-crCS^{ETCI}TT0) \wedge (\nexists E-xcrC \in E-crCS^{ETCI}TT0)] then go on;
- 7') if [\exists E-crC^{*} \neq E-crCS^{TT0}] input COM(RS^{mrat}) and go on;
- 8') if [$\forall i, n, k \exists \Delta i, n, k ::=$ if (E-crCink = E-crC0nk) 'A' else 'N' is mathematically definable] then go on;
- 9') if [crH ::= $\Sigma 1 \leq n \leq N$ (min $\forall i \in \{1, \dots, \Delta i, n, 1 = 'N', \dots, \Delta i, n, K_n = 'N' \}$) ≥ 2] then output 'COM(ETCI)^{mat} is PA' & stop;

Boxes3: The FSTP-Test in ^{DNA}ISL & ^{(m)rat}&^{mat}KR — being an ETCI's factually&legally necessary&sufficient 9 tests to be passed for its satisfying SPL. For details see^[e.g. 390, 508].

2.a Correctly interpreting the Supreme Court's SPL-framework indispensibly requires the notional scrutiny known since & from Analytic Philosophy that often is felt (mistakenly) to be superfluous. Accordingly, the meaning of a bold term below on the left denotes the notional factual quality of an ETCI's item, axiomatically definable in ISL, i.e. equivalent to the right of "—". Thus^{b)}:

- **transcendental** – this item is excluded from SPL-satisfiable testing, as embodying a highly speculative notion;
- **metaphysical** – not being "highly speculative", but describable such that this property is recognizable to be amenable to metarationalization, hence describable by informal "O-level-predicates" of this ETCI located on its notional **O-level**;
- **metarational** – being describable by basic English ISL-expressions ^[e.g. 372, 390] describing the semantics of all identifiable & relevant O-predicate parts, i.e. being conjunctions of "A-level-predicates" in ISL, hence a priori axiomized or easily axiomizable, located on its notional **A-level**;
- **rational** – being describable by basic English ISL-expressions describing the individual summands of the A-predicates' such conjunctions, i.e. being rationalizable and mathematizable by elementary "E-level-predicates" located on its notional **E-level**;
- **mathematical** – being describable by E-predicates in mathematical KR (i.e. also located on the notional E-level).

b These notional 'factual' qualities — partially already identified by G. Berkeley & I. Kant^{1.c)}, and here refined as implicitly but indispensibly required by the Supreme Court's SPL-framework — are of crucial importance for an ETCI's CI & CC, i.e. their meanings. Thereby **Cont'd on p 10**

Copyright by 'TELES Patent Rights International', 2004-2019, Berlin.

V. The Supreme Court's Notionally Refined ETCI Specification in ISL.

V.1 The Supreme Court implicitly required — by requiring to use its framework and hence its preciseness — to develop for an ETCI a “**Knowledge Representation, KR**” modeled by (non)creative concepts, here called O-/A-/E-(n)crCs that indicate any crC being located on its ‘original’/‘aggregated’/‘elementary’ level of notional resolution and of metaphysical/metarational/rational/mathematical^{2.a)} quality. This ‘layered’ KR of any ETCI must satisfy § 112 of 35 USC. Hence the (sub)test1-3 of the FSTP-Test. Box2 indicates that an E-inC is a mongrel, as in CI/CC^{2.b)} it is “definitional (= no test)”/“verificational (= test1-3)”.

V.2 It also requires the separation of any ETCI's meaning into its N constituent **ETCI-elements** X_{0n} , $1 \leq n \leq N$, each having a property modeled by a metaphysical or metarational predicate, represented by an **O-concept**, $O-C_{0n}$, $n=1, \dots, N$. In the ETCI's patent specification, each $O-C_{0n}$ is described by its set of wordings or graphics, called an “**Original Mark-up Unit of Information Set, O-MUIS_{0n}**” (in ISL).

V.3 I.e., the set of O-concepts (“O-CS”) describes the ETCI's TT0 and its application on the O-level of notional resolution. For simplicity and w.l.o.g., we assume O-CS's 1-1-relation to A-CS, the set of **A-concepts**, $A-C_{0n}$, $1 \leq n \leq N$. Any $A-C_{0n}$ describes its peer $O-C_{0n}$ more precisely by a compound metarational predicate (also in ISL).

V.4 On the E-level, the ETCI is described by so-called elementary concepts, refining each A-predicate $A-C_{0n}$, $1 \leq n \leq N$, into a conjunction of “**basically independent E-Predicates/Concepts, E-crC_{0nkn}**”, $1 \leq k_n \leq K_n$, in ISL³⁾. Mathematically any $E-crC_{0nkn}$ is defined by its “**truth set, TS_{0nkn}**” (and potentially a set $E-MUIS_{0nkn}$). By Logic, an $E-crC_{0nkn}$ cannot be further refined^{1.c)} into an equivalent conjunction of basically independent ISL-concepts/predicates. Sometimes, a linear enumeration of the ETCI's all $E-C_{0k}$, $1 \leq k \leq K^+ (\geq K)$, is more convenient (see **V.6**).

V.5 For an ETCI, there are **creative** E-concepts, $E-crC_{0k}$, and **non-creative** E-concepts, $E-ncrC_{0k}$, which both additionally may be “**exceptional, E-xcrC_{0k}/E-xncrC_{0k}**” (and not necessarily identified by “x”). All 4 kinds of E-crCs are “factual”. They may be expanded to elementary “**inventive concepts, E-inCs**” by pairing them with “**legal concepts, leC_{0nk}**”. E.g., $E-inC_{0nkn} ::= \langle E-crC_{0nkn}, leC_{0nk} \rangle$ resp. $E-inC_{0k} ::= \langle E-crC_{0k}, leC_{0k} \rangle$, $1 \leq k \leq K$, etc. An ETCI's all concepts — the higher layer ones disaggregated into lower layer ones — are created by its inventor, if necessary confirmed by the pposc (= “person of pertinent ordinary skill & creativity”), and if creative are hitherto unknown (at least as to their truth sets).

V.6 By its *Alice* decision, the Supreme Court introduced the notion “**combination of (ETCI-)elements, COM(ETCI)**”, comprising the ETCI's key sets O-/A-/E-crCS, potentially having for an $1 \leq n \leq N$ several different subsets $E-crCS^{\circ}_n \subseteq E-crCS_n$ defining the ETCI, i.e. $\sum_{1 \leq n \leq N} |E-crCS^{\circ}_n| = K = \sum_{1 \leq n \leq N} K_n$ — even if assuming w.l.o.g. for simplicity that COM(ETCI) comprises only a single $E-crCS_n$ for any n (implying that nevertheless — if for an $n \exists E-crCS^{\circ}_n \neq E-crCS^{\circ \circ}_n$ — $\forall n$ of any ETCI holds $|E-crCS^{\circ}_n| = |E-crCS^{\circ \circ}_n|$).

VI. Some Giants of Cognition Theory.



10

FIG. 3: Some of the known creators of fundamental human cognitions — initially transcendental & metaphysical ones, later until today being rationality based and excluding irrationalities by meeting their ‘enabling’ requirement. It shall convey the awareness that most of the here reported SPL cognitions couldn’t have been achieved without their groundbreaking scientification and/or mathematization cognitions.

Cont’d from p.8 are here completely excluded, in favor of rationality based cognitions (see Section IX).

2.c the following *Myriad*-ETCI semantics scientification without graphics support is evidently of the same semantics as the above one with graphics support. While its ‘Linking’ section is much smaller than its graphics section, it does not expose the ‘use hierarchy’ — from System Design known to be crucial for achieving transparency in the design of a system. The use hierarchy is a key structural phenomenon of decisive importance in CRISPR and alike ^{bio}ETCIs.

<p>COM(^{mrat}ETCI)::={O-crC0n ::= mphysO-MUIS0n, 1≤n≤N, identifying TT0 by E-crC0S and its E-xcrC0S} ∪ ∪ {A-crC0n, 1≤n≤N} [superfluous for ^{bio}ETCIs^[486]] ∪ E-crC0S^{mrat}::={E-crC0k ∨ E-nrcC0k ::= k-ISL-sentences, disclosed by E-^{mrat}MUIS0k, 1≤k≤K}, having N::= 3 ETCI-elements: X1::= Tissue_of_testee (TT), X2::= Wildtype-info (WT), X3::= Application (APP), with K::= 8 E-properties, abbreviated by E-crCk::= ek, i.e.:</p> <p>ratEcrC0S::= {(e1,1)=e1::= T(issueof)T(estate)G(ene)S(quence)o(f)B(RCA)1g(ene)• (e1,2)=e2::= TTGSob1R• (e1,3)=e3::= TTGSob1c•; (e2,1)=e4::= WTGSob1g• (e2,2)=e5::= WTGSob1R• (e2,3)=e6::= WTGSob1c•; (e3,1)=e7::= diff(e1,e4) ∨ diff(e2,e5) ∨ diff(e3,e6)• (e3,2)=e8::= ∃allele (TTGSob1g^{hybrid}(probe)GSob1g & ^{iso}gDNA<TTGSob1g))•</p>	<p>[resp.]}.</p>
<p>Linking ::= e1:e4:e8• e2:e5• e3:e6• e4:e1• e5:e2• e6:e3• e7:X1• e8:e1•.</p>	

VII. Learning Using ISL & the IES & FSTPtech by Patenting.

For persons with some SPL knowledge it is extremely easy to learn using ISL, the IES, and the FSTP-Test.

VII.1 ISL is designed as a language family, the base version of which is denoted by ${}^0\text{ISL}$. It is expandable ${}^{X/Y}\dots$ area-wise, for specifying the resp. ${}^{X/Y}\dots$ ETCIs by ${}^{X/Y}\dots$ ISLs, e.g. a ${}^{\text{DNA}}\text{ETCI}$ by ${}^{\text{DNA}}\text{ISL}$, or broader a ${}^{\text{BIO}}\text{ETCI}$ by ${}^{\text{BIO}}\text{ISL}$ ^{3.a}). While rational reasoning about e.g. a specific ${}^{\text{DNA}}\text{ETCI}^\circ$ (including specifying its $E\text{-}{}^{\text{DNA}}\text{crCS}^\circ$) is possible but lengthy, mathematizing it requires $E\text{-crCS}^\circ$'s “**All Universes Set, AUS**”^o in mathematical KR, e.g. for facilitating executing this reasoning fully automatically^b).

VII.2 As shown in **IV** and **VI**, any ISL-member comprises a bipartite ‘alphabet’ alias ‘dictionary’: One part is ISL-member specific and ETCI independent, while the other part comprises all meaningful notions from the ETCI° at issue. I.e.: Except for ${}^0\text{ISL}$, for any other ${}^X\text{ETCI}^\circ$ the corresponding ${}^X\text{ISL}^\circ$ must be generated, first, as outlined in **VII.1** by ${}^X\text{ETCI}^\circ$'s AUS — unless ${}^0\text{ISL}$ is X parametrizable for generating ${}^X\text{ETCI}^\circ$.

VII.3 While **VII.1** seems to be complex, the learning process of using ISL & the IES & FSTPtech basically requires familiarizing only with few new notions. For any ETCI, the 4 sections of 35 USC state only 9 requirements, which the FSTP-Test maps on the 9 tests, $\circ=1,2,\dots,9$. In FSTP-Test's calibration mode, i.e. in inputting an ETCI, the IES prompts the user through all ETCI items. For outputting an ETCI test result, the IES needs for any test only a single by the IES prefabricated LAC.

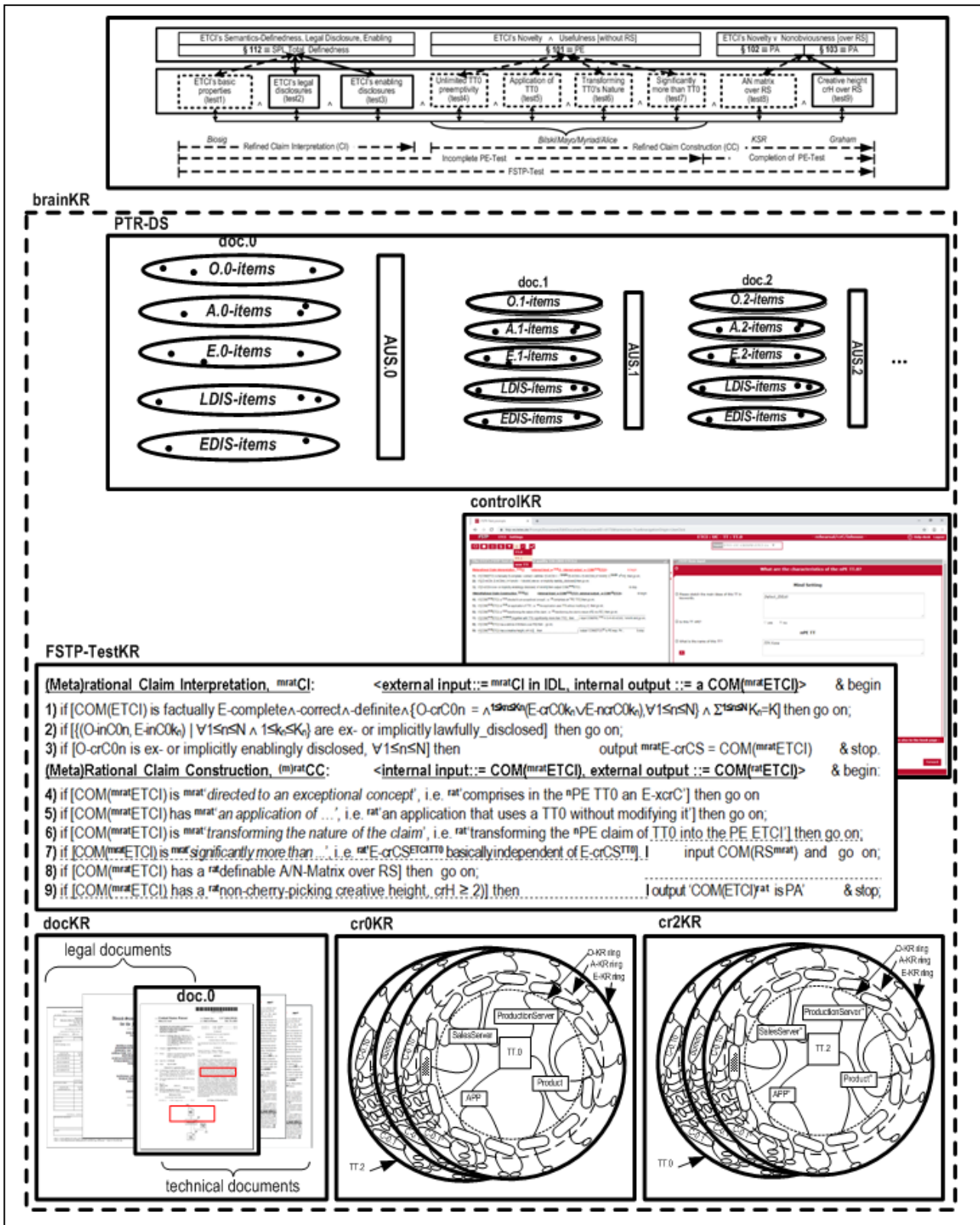
VII.4 The IES provides access to the FSTP-Test by a conventional ‘multimedia user interface, MMUI’. In calibration and testing mode of the IES the MMUI is basically the same. It talks the user through a user guidance whatever by IES provided and user selected – as known from other advanced application systems, yet in patenting hitherto unknown. The MMUI is usable in local or client/server mode, but also in dialog mode over the Internet, currently only between two cooperating end users, e.g. an inventor and patent lawyer, or the latter and an examiner, or ...

VII.5 Finally, the IES evidently bars much nonsense that usually is found in reasoning (about an ETCI) and enforces some stereotypic but correct arguing — which hence provides unintended but very efficient automatic learning, especially to frequent IES users (such as potentially patent examiners, patent lawyers, patent managers, ...), comprising also the subtleties of the by the Supreme Court refined SPL precedents about ETCIs.

11

^{3.a} for enabling mathematically defining its ‘joint’ meaning. I.e.: Then for a specific $E\text{-}{}^{\text{DNA}}\text{crCS}^\circ$ upfront its $\text{AUS}(\text{DNAcrCS}^\circ)\text{ISL}$ must be defined (e.g. by an EBNF), its compiler automatically construed by a state-of-the-art compiler-compiler, and the latter's output input to the IES (as part of its calibration with $E\text{-}{}^{\text{DNA}}\text{crCS}^\circ$). I.e.: For an area Y , a ${}^Y\text{ETCI}$, a specific $E\text{-}{}^Y\text{crCS}^\circ$ of it, and its “**All Universes Set, AUS**” of $E\text{-}{}^Y\text{crCS}^\circ$ — being the set of $E\text{-}{}^Y\text{crCS}^\circ$'s all universes defining of all $E\text{-}{}^Y\text{crC}^\circ \in E\text{-}{}^Y\text{crCS}^\circ$ their specific ‘universes’ that define their $\text{TS}(E\text{-}{}^Y\text{crC}^\circ)$ s — here is defined: An $E\text{-}{}^Y\text{crC}^\circ \in E\text{-}{}^Y\text{crCS}^\circ$ is called “**basically independent** (‘bi’ alias ‘≠’) over $E\text{-}{}^Y\text{crCS}^\circ\{E\text{-}{}^Y\text{crC}^\circ\}$ ”, for brevity “**basically independent**”, if $\nexists \in \text{AUS}\{E\text{-}{}^Y\text{crC}^\circ\}\text{ISL} = E\text{-}{}^Y\text{crC}^\circ$. See Section **IX** & [508].

^b By its AUS the mathematical definition of the $\in E\text{-}{}^Y\text{crCS}^\circ$'s is no longer stated separately for the individual $E\text{-}{}^Y\text{crC}^\circ$'s, as in^{4.a}), but as a compound. DNAtch here is at the Molecular Biology's verge to Atomic Biology and its inter-atomic forces (also between its different genes). This requires refining L. Pauling's factual cognitions — as clearly indicated by uniform geometries of DNA molecules in genomes. Without this refinement it is impossible to correctly decode therein the coding of information indispensable for solving e.g. CRISPR's ‘off-target’ problem or of the significance of the ‘deviation from normality’ of its sets of nucleotides in 1 or several genes^[508]. The Supreme Court repeatedly required determining SPL satisfaction criteria such that they would not preempt future ETCIs, e.g. AUS sensitive ones^{3.c}).



12

FIG. 4: A brainKR of 6 Virtual Screen Shots^{4.a)} and on top of it 35 USC §§ 101/102/103/112 and their 9 tests

VIII. Virtual 'Screen Shots' of the UI on the IES for an ETCl.

VIII.1 FIG 4 shows 6 virtual screen shots of the IES UI — in total called brainKR — of all items related to the FSTP-Test of the *DDR-ETCl* seen or imagined by the IES user^{3.c}). Below the controlKR & FSTP-TestKR of FIG 4, the left most screen shot models two 'clear_dockKR-stacks', the left/right one of legal/factual docs. The 2 'crKR' screen shots right of it show of 2 of its factual docs their O/A/E-structures and may point to their resp. crCs' MUIs, as selected by the actual IES user(s)/tester(s).

VIII.2 On top of the 2 middle screen shots, the 'brainKR' screen shot quotes all modelling items' input to the IES, i.e. to its FSTP-Test — as prompted by the IES when calibrating the ETCl at issue. On request by the actual IES user(s)/tester(s), the IES shows any items' all relations by the IES & FSTP-Test automatically generated between them, and further items and relations supporting dynamically controlling IES output in ISL as well as this IES'es dynamic actual output control (as needed for enabling the IES to instantly react on any event caused by executing the FSTP-Test, e.g. for guidance to its next step or any other information to the user).

VIII.3 The elements of the box on top of the 'brainKR' screen shot indicate the 9 testo's of the FSTP-Test, known from Section IV. Besides executing them, they also control the IES'es output in calibration mode and in response mode (both as customized by the user as part of its IES calibration or its whatever item determination). Any true output is automatically generated as LAC and textually presented on the bottom lines of the resp. response controlKR screen and/or graphically and/or multimedially on appropriate output devices.

VIII.4 Double headed arrows exist (but are not shown) between the sets of all items ●of the ETCl and PTR-DS at issue, input for its SPL satisfaction test into to the IES, and ●of thereby involved legal documents coming (rudimentarily) with the LACs output by the IES.

VIII.5 In total: These virtual screen shots provide direct access to and/or then crossovers from

- **ALL** items existing in any FSTP-testo of the ETCl, the IES is (being) calibrated with, to:
- **ANY ONE** item to its peer in any TTi, TT0 containing the ETCl at issue – and back.
- **ANY ONE** item to **ANY ONE** of its relation – and back.
- **ANY ONE** item relation to its peer in any TTi – and back.
- **ANY ONE** item's spot in **ANY ONE** testo – and back.
- **ANY ONE** impact of a change performed in one of the 6 screen shots on the other ones — and back.

VIII.6 Thereby the above virtual screen shots have only little to do with the real screen shots of the IES, as shown and explained by the UI manual^[see RefList] of the IES.

Cont'd

^{3.c} The IES, currently being a working β -Version (without the AUS feature), is under development and hence its user interface ('UI') is often changed. It nevertheless is over the Internet free of cost open for friendly testers for improving their ETCl's — i.e. for rationalizing them (even mathematizing when the AUS feature is enabled). As the *Myriad-/DDR-/Enfish-/UC-/Broad-ETCl's* are pre-installed on the IES a tester can by them learn the first steps on the IES before inputting on it the tester's own ETCl and checking it.

IX. Mathematizing Scientized ETCIs & SPL-Tests — SPL at its Best!

Mathematizing scientized ETCIs & their SPL-satisfaction test is a historic achievement of centuries! ^{4.a)}

IX.1 The FSTPtech's mathematization of an up-front scientized ETCI, its E-crCS & the SPL-test started by the fstm of the '*perspective in seeing*' in the 14th-17th century. The '*perspective*' was this period's first of its very many by human perception mathematized cognitions^{b)}, yet of only 'material'/'natural' / 'a-priori-defined' phenomena. These cognitions have in the 18th-20th century been expanded, e.g. by Berkeley/Kant/Frege/Peano/Parnas, to the theory that the human perception is also capable to recognize 'non-a-priori-defined' phenomena — initially (erroneously) assumed to be 'as such' not existing.

IX.2 The above 18th-20th century evolvement of this new cognitional concept — then not yet completely grasped — is since the 1970s known^[2] to be as to any ^{rat/mat}ETCI meaningless, unless this cognition is well-defined^{c)} on top of a semantics model exactly specifying this cognition's exact meaning. This model is specified by the *Alice* decision's COM(ETCI), as shown in the FSTP-Test in Section IV. It is the cognition theoretically groundbreaking achievement on which FSTPtech rests — & any ETCI.

IX.3 Thus, this initially new concept of cognition first •seamlessly penetrated into the 19th/20th centuries' Industrial age, especially the area of System Design as "**creative concept, crC**", and now, by FSTPtech — here on top of COM(ETCI) called 'O-/A-/E-crC', as it here has the notionally refined properties defined in Section V, as induced and required by the Supreme Court's cognition of its SPL-framework for the sake of US society — •seamlessly mutated into the 21st century's post-industrial alias emerging 'Innovation age'^{d)}.

IX.4 This Supreme Court induced concept of fstm ETCIs has overwhelming advantages.

- It enables preserving the integrity of any NPS — worldwide, if therein all ETCIs are well-defined^{b)}.
- It enables for any ETCI drafting a patent such that it is 'SPL unassailable' alias 'totally SPL robust' — if completely specified by a set, 'E-inCS', of its exact & scientized/mathematized elementary inventive concepts, E-inCs^{b)}, and its COM(ETCI)-KR^{c)}.
- It enables for any ETCI fully-/semi-automatically executing its FSTP-Test for SPL-satisfaction.
- If failing, it enables determining how to augment this ETCI for rendering it SPL-satisfying.
- It enables for any ETCI automatically identifying all adjacent ETCIs — as parameterized.

^{4.a} Any E-inC° of an ETCI is a pair <creative E-concept 'E-crC°', legal E-concept 'E-leC°'>.

• Any such E-crC° — basically independent over an E-crCS° \ {E-crC°} — is defined by the mirror predicate of this E-crC°'s specific finite "**truth set, E-crTS°**" (then this FFOL predicate is called to model this E-crC°), mathematically defined as an $\in \text{AUS}^{\circ 3}$. Hitherto it always is still available only as its verbal/rational KR°. As any known ETCI° (i.e. comprising E-crC°) is of FFOL, also its set of inC° based LAC°s — i.e. its by crC°'s parameterized (ETCI° specific = concrete) LAC°s — is also finite.

• Any such E-leC° is defined to describe its peer E-crC°'s location in COM(ETCI°) and this E-crC°'s disclosure(s) in the patent specification — both by the IES known due to its user's input into it of the COM(ETCI°) and the mark-ups in its patent (application) of its E-inCS°.

.b The famous 'golden section' of an architectural arrangement is a by 18 centuries earlier mathematization of an esthetic (necessarily 'materializable') notion, but not based on its upfront necessarily needed maturing & intuitively factually clarifying of intellectually complex notions — on this notion's '**scientification**', as called here. Other millennia earlier such mathematizations of notions had been e.g. the natural numbers.

.c A '**well-defined**' ETCI° — satisfying the framework-based SPL^[508] — has the property to be of limited preemptivity as tied or tiable only to one or a few already identifiable or foreseeable applications (of the E-xcrCS° or its TT0 disclosed by ETCI°'s patent specification), which are explicitly quoted in ETCI°'s patent specification and specified by ETCI°. As shown by Section VI.

.d Here it promises and/or threatens to become this world's virtual 6th continent of unlimited numbers of sheer unlimited factual innovations.

X. An Aftermath



FIG. 5: Marc Chagall's GAD

As interpreted today, Chagall models by his GAD the metaphysic process of cognition, e.g. in patenting. GAD doesn't get stuck in metaphysics but strives to overcome the flat world's such cognitive shortcomings by forearming with rationality for gaining at least also its birds' perspectives — as G. Berkeley / I. Kant / G. Frege / D. Parnas did by recognizing the need to distinguish ordinary/'materialistic' human perception from 'idealistic'/immaterial human cognitions. This dichotomy is inherent to probably any flat patent versus probably any fundamental innovation, and is mirrored by the Supreme Court's justification of its US SPL's reinterpretation by its here elaborated on line of US SPL framework decisions, i.e. when requiring that the lower courts are also becoming aware of it.

Patenting CTCIs got along without this dichotomy, as human intuition enabled dependably evaluating them under SPL the simpler way, less intellectual as plainly materialistic. Yet evaluating also ETCIs under SPL by intuition proved inconsistent, as they often are far too sophisticated for it, due to their unavoidable immaterialistic properties — but not for Berkeley's/Kant's/Frege's/Parnas' refined cognition capabilities, today called "AI".

By the same reason the Supreme Court's notional refinement of its cognition as to SPL precedents about ETCIs — it complemented their pre-framework only materialistic perception by their immaterialistic properties, esp. for ETCIs' preserving the integrity of the US NPS — is the necessary & sufficient AI alias logic fundament of their consistent & predictable SPL precedence: The first scientizing & then mathematizing of modelling ETCIs and their SPL-satisfaction.

Curriculum Vitae of the Author

- Born in Lodz (Poland) in 1936,
- German nationality since 1939,
- Resident of Germany since 1945,
- Abitur in Bavaria in 1956.

Academic Career:

- Mainly self-financed studies at the Technical University of Berlin (TUB) – applied mathematics, theoretical physics, abstract mathematics, several arts.
- Diploma thesis on non-relativistic elementary particle theory (Schrödinger theory), doctoral thesis on satellite mechanics (optimal orbit transfers), habilitation thesis on operating systems (multiprocessor scheduling).
- From 1971: Co-author of the program for establishing information sciences at the German Universities, as member of the German Federal Government's resp. board (being the academic IT representative for Berlin to the Federal Minister for Research and Technology).
- Additionally from 1971: Participation in the preparation, definition, foundation and administrative implementation of the Department of Information Sciences at the TUB.
- Since 1972: Professor and since 1974 full professor of operating systems (later also of communication systems) in the Department of Information Sciences at the TUB – after several calls from other universities.
- Ramping up, for many years, awareness of the upcoming telecommunications technologies in Germany, by running on behalf of the GI (= *Gesellschaft fuer Informatik*, the German nationwide academic society of information and telecommunications technologies) the annual Telecommunications conferences at the TUB.
- Chairman or member of many teaching and studies committees, research and development committees, and examination boards for the various Information Sciences programs of the Commission of the EU resp. at the TUB.
- More than a dozen former students made become university professors.
- 1976 to 1994: Member of national, European and international bodies for development, promotion and standardization of future IT technologies, in particular telecommunications/WAN/LAN/text/security technologies.
- 1996: Application for sabbatical leave from teaching responsibilities at the TUB, granted for "hands-on management" of TELES AG (see below).
- 2001: Emeritus of TUB, indispensable at German universities' retirement age.

Business Career:

- 1981: Foundation of TELES GbR, and 1983: Foundation of TELES as GmbH, with shareholder's equity of 50 TDM, sole shareholder and general manager. Then focus of TELES GmbH: development, manufacturing and distribution of advanced telecommunications and security technologies and systems.
- 1996: Transformation of TELES GmbH to an AG, at profitable annual revenues of 22 MDM, sole shareholder & CEO.
- 1998: IPO of TELES AG & acquisition of the webhosting start-up STRATO, majority shareholder and CEO until 2019.
- 1999: Refocus of TELES on value-added Internet systems.
- Since 2002: Member of the National Economic Affairs Council of the CDU, annual revenues of 100 M€..
- 2005: Sale by TELES of its subsidiary STRATO AG for more than 130 M€.
- 2005 – today: After retiring from TELES' operational business in 2005, first developing a portfolio of international patents for future mobile networking high-end applications. Then Creating/Launching/Running the privately by the author financed FSTP-R&D-Project of more than 20 M€ budget. Its mission: The international mathematical scientification of SPLs for ETCIs (nationally very similar). I.e., the notional rationalization & mathematization of patents on ETCIs, as then induced by the US Supreme Court — leading to developing the FSTP-Test & FSTP-Technology based on it (as by this brochure outlined). The FSTP-Project's Reference List of Publications see at www.fstp-expert-system.com.

Excerpt from the FSTP-Project's Reference List

Many FSTP-Project mails, including this one, are written in preparation of the textbook^[182] – i.e. are not fully self-explanatory independent of other FSTP-mails

<p>[2] The term 'Artificial Intelligence' here denotes specific cutting edge deterministic IT & Mathematics areas, e.g. in KnowledgeRepresentation (KR)/ Description Logic (DL)/ Natural Language (NL)/ Semantics/ Semiotics/ (Nonsequential) System Design/..., i.e. a resilient fundament for analyzing 35 USC/SPL by AI-based 'Facts Screening/Transforming/Presenting, FSTP'-Technology, developed here, induced by the US Supreme Court's framework decisions^[182]-All the ETCIs' meanings, especially Molecular Biology meanings of all 'BIO-prefixed' acronyms, are based on so understood AI.</p> <p>[182] S. Schindler: "Basics of Mathem. Innovation Theory and AI Based Patent Technology", Textbook, in prep.</p> <p>[355] S. Schindler: "An Ama. SPL Cogn.: Any Pat. Appl. Is Draft. Tot. Rob.", pub.07.03.2017*).</p> <p>[372] S. Schindler: "'IDLs' & KR, and Easily Drafting & Testing Patents for Robustn.", pbl., 16.05.2017*).</p>	<p>[390] S. Schindler: "The Recent AIPLA Meeting's ...\$101-Guidelines ...", publ.,14.06.2017*).</p> <p>[488] S. Schindler: "UC's vs. Broad/MIT/Harvard's CRISPR Patents & the Supreme Court's Framework", Part I, publ. 20.09..2017*).</p> <p>[495] S. Schindler, B. Wittig: "UC's vs. Broad's CRISPR Patents ...", Part III, publ. 30.01.2019*).</p> <p>[508] B. Wittig, S. Schindler: "UC's vs. Broad/MIT/Harvard's CRISPR Patents & the Supreme Court's Framework— Graphical Support in (M)BIOETCI Specification", Part V", , to be pub. In Q3/2019</p> <p>[510] S. Schindler: "Finally, CAFC & USPTO Started Friendly! One Year of Andrei Iancu's Spirit in the USPTO — and All US Legal Patent-Business is of Good-Will.", publ. 05.03.2019.*)</p> <p>*) docs & complete Ref. List on www.FSTP-expert-system.com</p>
--	--