"Innovation Description Languages, IDLs" & Knowledge Representations, KRs
and
— Easily Drafting&Testing Patents for Their Total Robustness —

Sigram Schindler[1.a)]
TU Berlin & TELES Patent Rights International GmbH

I. DEFINITIONs of a TOTALLY ROBUST PATENT, of an IDL, and of its IDLETCI

For any ETCI its KR[2] in any IDL dramatically facilitates mathematically & semi-automatically ●drafting it (from scratch) totally robust and/or ●proving it to be totally robust (if preexisting) — unless it is false.

Key for totally robust patents is the rationalization[b)4)] by the Supreme Court's *MBA* **framework** of 35 USC **Substantive Patent Law**, **SPL** (§§ 112/101/102/103), thus enabling it to unassailably protect **Emerging Technology Claimed Inventions**, **ETCIs**, without jeopardizing the US patent system.

IDL-Axiom: An **"IDL"** is any elementarily mathematizable[2)] subset of any natural language that is next to trivial, yet is expanded by all notions[c)] that the Supreme Court by its *MBA*-framework ex- or implicitly requires to be used in legally deciding an ETCI to satisfy SPL — by testing it in this IDL. Thus, an IDL is a **Domain-specific Language**, **DSL**[d)], for facilitating drafting and or using (e.g. testing) IDLETCIs.

Even if applying the **FSTP-Test**[e)], hitherto no way has been known to stereotypically for any ETCI semi-mathematically/-automatically ●draft by a human an ETCI's totally robust patent(application) specification in a thus expanded subset of a natural language[f)], e.g. an English IDL, and/or — the other way around — ●test any ETCI by this IDL's J IDLLACs[f)] for its meeting all requirements of 35 USC/SPL[g)].

Section II shows by 8 FIGs1 the "IDL/freestyle versus nIDL**FSTP-Test**" (= **F**acts/**S**creening/**T**ransforming/**P**resenting-Test) of a PTR[h)] in one of its IDL_or_nIDLKR(PTR)s (= IDL_or_nIDLKR(ETCI)[h)]) — its FIGs2 in[373] their 'joint mental structure brainKR'[373] in the tester's brain, incrementally completed. I.e.: After FIGs1 remind[354] of and elaborate on the vastly automatic IDLFSTP-Test for the mathematically proven total robustness of any ETCI in IDLKR over the Supreme Court framework's SPL interpretation, these FIGs2 indicate the large number of freestyleFSTP-tests for this ETCI to be performed free-handedly by a human tester, if it is in today's freestyleKR — for assessing its likely robustness only!

Section III sums up the **enormous** increases in efficiency IDLs enable with all PTOs & patentees & law firms, as any IDLFSTP-Test warrants for any IDLETCI a **huge** increase of convenience&efficiency& quality ●in drafting it to be totally robust and/or ●testing it for its total robustness. And Section IV briefly comments on2 actual letters to Congress concerning allegedly only the PE problem, but in truth the entire SPL satisfaction problem as caused by ETCIs' importance and their threatening the US NPS.

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[1] **.a** :[354/ftn2.a)], **.b** :[354/ftn2.h)], **.c** :[354/ftn2.c)], **.d** :[371.1].

.e — which to pass by an ETCI is necessary and sufficient for it to satisfy SPL in *MBA*-framework flavor —
All results presented here also hold for the EPA and for all other 'National Patent Systems, NPS' and 'Classic Technology Claimed Inventions, CTCIs' — yet in both areas are still considered to be unnecessary and hence left aside for the time being.
Due to the rapid development of emerging technologies, it is unavoidable that many examiners/jurors/lawyers/judges often can't fully understand ETCIs or SPL. Though their decisions about ETCIs then are totally untenable — especially when they construe alleged prima-facie cases — they nevertheless are done in spite of contradicting quite evidently correct presentations by the inventors and often become final. This inevitably leads to ETCI/case-wise unpredictability of USPTO and/or court decisions about them and over several of them becoming irreconcilably inconsistent. This has frequently happened in particular with the CAFC and/or the USPTO (see the FSTP-Project Reference List).

.f by a set of J uniform (over all ETCIs) and NT-area vastly independent, yet potentially complex **Legal Argument Chains**, **LACs.** From FIG1.3 follows structurally (i.e. **crC0S_AXIOMs-Lib**[373] depending[4)]): J ≈ 2∗K + 7 (as the K E-crCs are checked twice by FSTP-test1&-test2, and test7 is evidently redundant), whereby only 9 independent[4)] LACs are needed, yet any LAC having several parameters. I.e., this total number of questions for a LAC needed in SPL testing an ETCI is much smaller than the 240+ questions reported in a recent USPTO event, the statements of which moreover are not resilient (not to say meaningless) as hopelessly metaphysical[2)].
These for both communities totally unexpected results — for the patent community just as for the program correctness proving community — are basically due to the Supreme Court having induced a rational[b)] SPL-satisfaction-test by ETCIs, i.e. the FSTP-Test[e)], on the one hand, and this FSTP-Test is a program of an absolutely simple structure, on the other hand, **.g** :[261,298],[354/c),355/II.4],[371.2]

.h IDL_or_freestylePTR::= '**P**air of **T**eaching, alias IDL_or_freestyleCOM(ETCI), and a **R**eference Set of prior art documents for this teaching'. The notion PTR is replaced by the notion ETCI, wherever possible without causing misunderstanding, and the prefix "IDL_or_freestyle" is often omitted.

.i :[9.c]. The 8 KRs are metaphysical, metarational, rational, and/or (not yet fully) mathematical[4)]. All cases assume the same IDL resp. freestyle language — unless additional provisions are given for overcoming the distinctions between unequal IDLs resp. freestyles, being always determinable (unless the freestyle language is not rational[4)]) but not elaborated on here. A distinction between an IDL and a freestyle language is that the latter fails to know all rational *MBA* framework notions. Many popular programming languages' (Algol, Fortran, Pascal, …) tiny subsets are easily expandable to IDLs (if needed). Vice versa: Often a second glance at an alleged simple IDL is required for verifying that it is not still a freestyle language — a point not understood by the USPTO and the CAFC, hence often delivering SPL decisions about ETCIs contradicting the Supreme Courts *MBA*-framework for them.

II. ETCIs' FSTP-DRAFTING/-TESTING for TOTAL ROBUSTNESS in an ^{IDL}KR versus a ^{nIDL}KR

An ETCI's FSTP-Test is shown by 8 different KRs, 4 (nIDL_&_nonrefined)KRs and 4 (IDL_&_refined)KRs: ●The 2 nonIDL_alias_freestyleKRs1.1&.2 contradict the *MBA*-framework as not refining it accordingly, as ●the 2 IDL & refinedKRs do, and ●the 4 KRs1.1'-4' are semantically 'equivalent' to those of FIGs1.1-4[2)3)].

FSTP-Test- start *(Classic ETCI KR, need of MBA-framework-refinement not yet recognized)*

input ^{L}**COM(ETCI) ≡ inL0S ::= '{**inL0n ≈ MUIS0n, ∀1≤n≤N**}';**
if [<crL0n, leL0n>, ∀1≤n≤N, **is lawfully_disclosed]** **else_output** *'*^{L}*COM(ETCI) is not lawfully_disclosed'* ∧ **stop;**
if [crL0n, ∀1≤n≤N, **is enablingly_disclosed]** **else_output** *'*^{L}*COM(ETCI) is not enablingly_disclosed'* ∧ **stop;**
(in the ETCI's claim interpretation by §§ 112 for a ^{L}*COM(ETCI) of it — representing the ETCI — these 2 tests are necessarily passed by the ETCI for its satisfying the SPL)*
if [^{L}**COM(ETCI) is PE]** **else_output** *'*^{L}*COM(ETCI) is nPE'* ∧ **stop;**
if [^{L}**COM(ETCI) is over RS not (anticipated ∨ obvious)]** **else_output** *'*^{L}*COM(ETCI) is nonpatentable over RS'* ∧ **stop;**
output *'*^{L}*COM(ETCI) satisfies SPL'* ∧ **stop.** **FSTP-Test- stop**.

FIG1.1: The ETCI's FSTP-Test in ^{nonIDL}(O-)KR is of pre-*MBA* era, i.e. of highly metaphysical quality[2)3)]

FSTP-Test- start *(Hypothetic ETCI KR: Need of inventive concept not yet recognized)*

input ^{L}**COM(ETCI) ≡ inL0S ::=** '{inL0n ≈ MUIS0n, ∀1≤n≤N}**';**
if [<crL0n, leL0n>, ∀1≤n≤N, **is lawfully_disclosed]** **else_output** *'*^{L}*COM(ETCI) is not lawfully_disclosed'* ∧ **stop;**
if [{crL0n, ∀1≤n≤N} **is enablingly_disclosed]** **else_output** *'*^{L}*COM(ETCI) is not enablingly_disclosed'* ∧ **stop;**
if [{crL0n, ∀1≤n≤N} **is ((^{L}definite∀1≤n≤N) ∧ uniquely_defined ∧ useful)]** **else_output** *'*^{L}*COM(ETCI) is not (useful ∧ definite)'* ∧ **stop;**
(the ETCI's claim interpretation: Closing Remark is the same as in FIG1.1 — yet now also enabled meeting the 'Biosig requirements')
if [^{L}**COM(ETCI) comprises an nPE TT0]** **else_output** *'*^{L}*COM(ETCI) is not comprising an nPE TT0'* ∧ **stop;**
if [^{L}**COM(ETCI) is an application of the nature of TT0]** **else_output** *'*^{L}*COM(ETCI) is not an application of the nature of TT0'* ∧ **stop;**
if [^{L}**COM(ETCI) is significantly more than TT0]** **else_output** *'*^{L}*COM(ETCI) is not significantly more than TT0'* ∧ **stop;**
if [^{L}**COM(ETCI) is limited preemptive]** **else_output** *'*^{L}*COM(ETCI) is not limited preemptive'* ∧ **stop;**
(in the ETCI's claim construction by §§ 101 these 4 tests are additionally to be passed — then the ETCI's PE test by Bilski, Myriad and Alice is completed, i.e. it is patent-eligible)
if [^{L}**COM(ETCI) is over RS not (anticipated ∨ obvious)]** **else_output** *'*^{L}*COM(ETCI) is not patentable due to RS'* ∧ **stop;**
(in the ETCI's claim construction by §§ 102/103 this test is additionally to be passed — then also the ETCI's patentability test by KSR & Graham is completed, i.e. it satisfies SPL)
output *'*^{L}*COM(ETCI) satisfies SPL'* ∧ **stop.** **FSTP-Test- stop**.

FIG1.2: The ETCI's FSTP-Test in $^{much\_less\_nonIDL}$(O-)KR is of pre-&post-*MBA* era, i.e. of metaphysical quality[2)3)]

FSTP-Test- start (Complete *MBA*-framework-refined KR)

input 'COM(ETCI) ≡ O-/A-/E-inC0S ::= 'O-inC0S ::= {O-inC0n ≈ O-MUIS0n, ∀1≤n≤N} ∪ A-inC0S ::= {A-inC0n ≈ A-MUIS0n, ∀1≤n≤N} ∪ ∪ E-inC0S ::= {(E-inC0nk ∨ E-ninC0nk) ≈ E-MUIS0nk, ∀1≤k≤Kn∧∀1≤n≤N} ∪ **inC0S_AXIOM-Lib';**
1) if [(E-crC0nk ∨ E-ncrC0nk), ∀1≤k≤Kn, ∀1≤n≤N, is lawfully_disclosed**]** **else_output** *'COM(ETCI) is not lawfully_disclosed'* ∧ **stop;**
2) if [A-crC0n=∧$^{1≤k≤Kn}$(E-inC0nk ∨ E-ninC0nk), ∀1≤n≤N, is enablingly disclosed**]** **else_output** *'COM(ETCI) is not enablingly_disclosed'* ∧ **stop;**
3) if [COM(ETCI) is (E-definite ∧ E-complete ∧ uniquely_defined ∧ useful)**]** **else_output** *'COM(ETCI) is not (useful ∧ definite)'* ∧ **stop;**
(the ETCI's claim interpretation: Closing Remark same as in FIG1.2 — yet now also O-/A-/E-level notional resolution alias refinement performed)
4) if [COM(ETCI) comprises an nPE TT0**]** **else_output** *'COM(ETCI) is not comprising an nPE TT0'* ∧ **stop;**
5) if [COM(ETCI) is an application of the nature of TT0**]** **else_output** *'COM(ETCI) is not an application of the nature of TT0'* ∧ **stop;**
6) if [COM(ETCI) is significantly more than TT0**]** **else_output** *'COM(ETCI) is not significantly more than TT0'* ∧ **stop;**
7) if [COM(ETCI) is limited preemptive**]** **else_output** *'COM(ETCI) is not limited preemptive'* ∧ **stop;**
(in the ETCI's claim construction by §§ 101 these 4 tests are additionally to be passed — then the ETCI's PE test by Bilski, Myriad, and Alice is completed, i.e. it is patent-eligible)
8) if [COM(ETCI) comprises only independent E-inC0nk**]** **else_output** *'COM(ETCI) is not independent'* ∧ **stop;**
9) if [COM(ETCI) is definite over RS**]** **else_output** *'COM(ETCI) is not definite over RS'* ∧ **stop;**
10) if [COM(ETCI)'s semantic height over RS is (>0/>1 over one/several∈RS)**]** **else_output** *'COM(ETCI) is not patentable over RS'* ∧ **stop;**
(in the ETCI's claim construction by §§ 102/103 this test is additionally to be passed — then also the ETCI's patentability test by KSR & Graham is completed, i.e. it satisfies SPL)
output *'COM(ETCI) satisfies SPL'* ∧ **stop.** **FSTP-Test- stop**.

FIG1.3: The ETCI's FSTP-Test in ^{IDL}KR is of post-*MBA* era, i.e. of rational quality[2)3)]

FSTP-Test- start *(Vastly mathematized MBA-framework-refined-KR)*

input 'COM(ETCI) ≡ O-/A-/E-inC0S ::= 'O-inC0S ::= {O-inC0n ≈ O-MUIS0n, ∀1≤n≤N} ∪ A-inC0S ::= {A-inC0n ≈ A-MUIS0n, ∀1≤n≤N} ∪ ∪ E-inC0S ::= {(E-inC0nk ∨ E-ninC0nk) ≈ E-MUIS0nk, ∀1≤k≤Kn∧∀1≤n≤N} ∪ **inC0S_ AXIOM-Lib ';**
1) if [<A-crC0n=∧$^{1≤k≤Kn}$(E-crC0nk ∨ E-ncrC0nk)>,∀1≤n≤N, is lawfully_disclosed**]** **else_output** *'COM(ETCI) is not lawfully_disclosed'* ∧ **stop;**
2) if [{A-crC0n=∧$^{1≤k≤Kn}$(E-inC0nk ∨ E-ninC0nk), ∀1≤n≤N}, is enablingly disclosed**]** **else_output** *'COM(ETCI) is not enablingly_disclosed'* ∧ **stop;**
3) if [COM(ETCI) is (E-definite ∧ E-complete ∧ uniquely_defined ∧ useful)**]** **else_output** *'COM(ETCI) is not (useful ∧ definite)'* ∧ **stop;**
(in the ETCI's claim interpretation: Closing Remark same as in FIG1.3)
4) if [scope(E-crCS^{TT0}) ≠$^{+}$ Φ**]** **else_output** *'COM(ETCI) is not comprising an nPE TT0'* ∧ **stop;**
5) if [(∏^{TT0}scope(E-crCS^{ETCI}) ⊆ scope(E-crCS^{TT0})**]** **else_output** *'COM(ETCI) is not an application of the nature of TT0'* ∧ **stop;**
6) if [(E-crCS^{Alice} ≠ Φ)**]** **else_output** *'COM(ETCI) is not significantly more than TT0'* ∧ **stop;**
7) if [(∏^{TT0}scope(E-crCS^{ETCI}) ⊆ scope(E-crCS^{TT0})) ∧ (E-crCS^{Alice} ≠ Φ)**]** **else_output** *'COM(ETCI) is not limited preemptive'* ∧ **stop;**
(in the ETCI's claim construction by §§ 101: Closing Remark same as in FIG1.3)
8) if [∀∈{E-crC0nk | 1≤n≤N ∧ 1≤k≤K^{n}} are independent of each other**]** **else_output** *'COM(ETCI) is not independent'* ∧ **stop;**
9) if [∀^{i,n,k}∃Δ^{i,n,k} **::=** if (E-crCink = E-crC0nk) 'A' else 'N'**]** **else_output** *'COM(ETCI) is not definite over RS'* ∧ **stop;**
10) if [∑$^{1≤n≤N}$(min$^{∀i∈[1,I]}$|{<Δ^{i,n,1}="N", ..., Δ^{i,n,Kn}="N">}|)≥2**]** **else_output** *'COM(ETCI) is not patentable over RS'* ∧ **stop;**
(in the ETCI's claim construction by §§ 102/103: As in FIG1.2 — yet now also meeting the KSR & Graham requirements, testing the ETCI's patentability, i.e. its satisfying 35USC/SPL)
output *'COM(ETCI) satisfies SPL'* ∧ **stop.** **FSTP-Test- stop**.

FIG1.4: The ETCI's FSTP-Test in ^{IDL}KR is of post-*MBA*-era, i.e. of rational & vastly mathematical quality[2)]

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[2] The FIGs1.1'-4' are slightly more informative than FIGs1.1-4 for explicitly quoting/reminding of the Supreme Court's 6 decisions defining its *MBA* framework. To facilitate grasping these 8 FIGs' messages when reading them, it helps to toggle forth-and-back between them (and all ftn's).

These 8 KRs of the FSTP-Test indicate by different highlights the vocabularies, syntaxes, and semantics of any of the 3 object-language-fragments integrated into the object-IDL, including those of their tiny natural languages wordings (self-explanatory for any IT expert, in[182,373] explained in more detail by a simple BNF). All of an IDL's linguistic constructs are used stereotypically over all ETCIs, as occurring in any COM(ETCI)'s FSTP-Test[3)4)]. Moreover: These 8 KRs in total evidently comprise all notions of ●Elementary Mathematics and of ●SPL of *MBA*-framework flavor, reported in trivialized English — thus greatly facilitating accepting the *MBA*-framework. This is amplified by showing: KRs1.1&1' are metaphysical (in a highly speculative manner as to several aspects, which applies to much of classic patent law thinking), KR1.2' is still metaphysical (in a less speculative manner, as 2 of the 3 preceding grounds remain), KR1.2 is metarational (in less speculative manner), KRs1.3&3' are rational — as by the MBA-framework expected[378,378,378] — and KR1.4&4' are partially resp. fully mathematical.

The deficient SPL understanding of the semantics of ETCIs in KR1.1 is currently the same in all national SPL jurisdictions, worldwide, except in the US: The Supreme Court's *MBA*-framework — and its discussion in the US patent community supported by the CAFC and USPTO, not being aware of these two institutions' uncertainties about the currently nonexistent logical foundations of their working, in particular not noticing that their internal and external clashes of recent years are the unavoidable consequences of this lack of a consistent paradigm for it — has overcome these uncertainties, thus putting the US SPL into an international lead of about 10 years, in particular as US SPL thereby additionally has been put in line with AIT[2], thus enabling it to achieve the advantages of robustness & efficiency in the ETCI's patent business reported here.

FSTP-Test- start *(USPTO: BRI^{USPTO}&2-step-test KR, no inCS, no MBA-framework-refinement)*

input ^{L}**COM(ETCI) ≡ inL0S ::= '{**inL0n ≈ MUIS0n^{USPTO}, ∀1≤n≤N**}';**
if [<crL0n, leL0n>, ∀1≤n≤N, **is lawfully_disclosed]** **else_output** *'^{L}COM(ETCI) is not lawfully_disclosed'* ∧ **stop;**
if [crL0n, ∀1≤n≤N, **is enablingly_disclosed]** **else_output** *'^{L}COM(ETCI) is not enablingly_disclosed'* ∧ **stop;**
if [{crL0n, ∀1≤n≤N} **is (useful** ∧ (^{L}**definite**∀1≤n≤N) ∧ **uniquely_defined)]** **else_output** *'^{L}COM(ETCI) is not (useful ∧ definite)'* ∧ **stop;**
(in the ETCI's claim interpretation by §§ 112 for a ^{L}COM(ETCI) of it — representing the ETCI — these 3 tests are necessarily passed by the ETCI for its satisfying SPL)
if [^{L}COM(ETCI) passes the USPTO's 2-step-test] **else_output** *'^{L}COM(ETCI) is nPE'* ∧ **stop;**
if [^{L}COM(ETCI)] passes the Graham test **else_output** *'^{L}COM(ETCI) is nonpatentable over RS'* ∧ **stop;**
output *'^{L}COM(ETCI) satisfies SPL'* ∧ **stop.** **FSTP-Test- stop**.

FIG1.1': The ETCI's FSTP-Test in ^{nonIDL}(O-)KR is of pre-*MBA* era, i.e. of highly metaphysical quality[2)3)]

FSTP-Test- start *(CAFC: BRI^{PHI} & incomplete Alice-interpretation, no O-/A-/E-refinement)*

input ^{L}**COM(ETCI) ≡ inL0S ::=** '{inL0n ≈ MUIS0n^{PHI}, ∀1≤n≤N}';
if [<crL0n, le0Ln>, ∀1≤n≤N, **is lawfully_disclosed]** **else_output** *'^{L}COM(ETCI) is not lawfully_disclosed'* ∧ **stop;**
if [{crL0n, ∀1≤n≤N} **is enablingly_disclosed]** **else_output** *'^{L}COM(ETCI) is not enablingly_disclosed'* ∧ **stop;**
if [{crL0n, ∀1≤n≤N} **is((**^{L}**definite**∀1≤n≤N) ∧ **uniquely_defined** ∧ **useful)] then_met *Biosig*** **else_output** *'^{L}COM(ETCI) is not (useful ∧ definite)'* ∧ **stop;**
the ETCI's claim interpretation: Closing Remark same as in FIG1.1 — yet now also meeting the 'Biosig requirements'
if [^{L}COM(ETCI) is an application of the nature of TT0] **else_output** *'^{L}COM(ETCI) is not an application of the nature of TT0'* ∧ **stop;**
if [^{L}COM(ETCI) is significantly more than TT0] **then_met *Alice*** **else_output** *'^{L}COM(ETCI) is not significantly more than TT0'* ∧ **stop;**
(in the ETCI's claim construction by §§ 101 such tests are additionally to be passed — then the ETCI's PE test by Bilski, Myriad, and Alice is completed, i.e. it is patent-eligible)
if [^{L}COM(ETCI) is over RS not (anticipated ∨ obvious)] **then_met *Graham*** **else_output** *'^{L}COM(ETCI) is not patentable due to RS'* ∧ **stop;**
(in the ETCI's claim construction by §§ 102/103 this test is additionally to be passed — then also the ETCI's patentability test by KSR & Graham is completed, i.e. it satisfies SPL)
output *'^{L}COM(ETCI) satisfies SPL'* ∧ **stop.** **FSTP-Test- stop**.

FIG1.2': The ETCI's FSTP-Test in $^{much\_less\_nonIDL}$(O-)KR is of pre-/post-*MBA* era, i.e. of metaphysical quality[2)3)]

FSTP-Test- start **(authentic *MBA* framework KR)**

input 'COM(ETCI) ≡ O-/A-/E-inC0S ::= 'O-inC0S ::= {O-inC0n ≈ O-MUIS0n, ∀1≤n≤N} ∪ A-inC0S ::= {A-inC0n ≈ A-MUIS0n, ∀1≤n≤N} ∪
∪ E-inC0S ::= {(E-inC0nk ∨ E-ninC0nk) ≈ E-MUIS0nk, ∀1≤k≤Kn∧∀1≤n≤N} ∪ **E-crC0S_DEF';**
1) if [(E-crC0nk ∨ E-ncrC0nk), ∀1≤k≤Kn, ∀1≤n≤N, is lawfully_disclosed] **else_output** *'COM(ETCI) is not lawfully_disclosed'* ∧ **stop;**
2) if [A-crC0n= ∧$^{1≤k≤Kn}$(E-inC0nk ∨ E-ninC0nk), ∀1≤n≤N, is enablingly disclosed] **else_output** *'COM(ETCI) is not enablingly_disclosed'* ∧ **stop;**
3) if [COM(ETCI) is (E-definite∧E-complete∧uniquely_defined∧useful)**] then_met *Biosig*** **else_output** *'COM(ETCI) is not (useful ∧ definite)'* ∧ **stop;**
(the ETCI's claim interpretation: Closing Remark same as in FIG1.2 — yet now also O-/A-/E-level notional resolution alias refinement)
4) if [COM(ETCI) comprises an nPE TT0] **then_met *Bilski*** **else_output** *'COM(ETCI) is not comprising an nPE TT0'* ∧ **stop;**
5) if [COM(ETCI) is an application of the nature of TT0] **else_output** *'COM(ETCI) is not an application of the nature of TT0'* ∧ **stop;**
6) if [COM(ETCI) is significantly more than TT0] **then_met *Alice*** **else_output** *'COM(ETCI) is not significantly more than TT0'* ∧ **stop;**
7) if [COM(ETCI) is limited preemptive] **else_output** *'COM(ETCI) is not limited preemptive'* ∧ **stop;**
(in the ETCI's claim construction by §§ 101 these 4 tests are additionally to be passed — then the ETCI's PE test by Bilski, Myriad, and Alice is completed, i.e. it is patent-eligible)
8) if [COM(ETCI) comprises only independent E-inC0nk] ***<need is not yet recognized>*** **else_output** *'COM(ETCI) is not independent'* ∧ **stop;**
9) if [COM(ETCI) is definite over RS] ***<need is not yet recognized>*** **else_output** *'COM(ETCI) is not definite over RS'* ∧ **stop;**
10) if [COM(ETCI)'s seman. height over RS is (≥1/≥2 if AC$^{1/≥2}$∈RS)**] then_met *Graham*** **else_output** *'COM(ETCI) is not patentable over RS'* ∧ **stop;**
(in the ETCI's claim construction by §§ 102/103 this test is additionally to be passed — then also the ETCI's patentability test by KSR & Graham is completed, i.e. it satisfies SPL)
output *'COM(ETCI) satisfies SPL'* ∧ **stop.** **FSTP-Test- stop**.

FIG1.3': The ETCI's FSTP-Test in ^{IDL}KR is of post-*MBA* era, i.e. of rational quality[2)3)]

FSTP-Test- start **(notional partially mathematized *MBA* framework KR)**

input 'COM(ETCI) ≡ O-/A-/E-inC0S ::= 'O-inC0S ::= {O-inC0n ≈ O-MUIS0n, ∀1≤n≤N} ∪ A-inC0S ::= {A-inC0n ≈ A-MUIS0n, ∀1≤n≤N} ∪
∪ E-inC0S ::= {(E-inC0nk ∨ E-ninC0nk) ≈ E-MUIS0nk, ∀1≤k≤Kn∧∀1≤n≤N} ∪ **crC0S_MatDEF';**
1) if [<A-crC0n=∧$^{1≤k≤Kn}$(E-crC0nk ∨ E-ncrC0nk)>,∀1≤n≤N, is lawfully_disclosed] **else_output** *'COM(ETCI) is not lawfully_disclosed'* ∧ **stop;**
2) If [{A-crC0n=∧$^{1≤k≤Kn}$(E-inC0nk ∨ E-ninC0nk), ∀1≤n≤N} is enablingly disclosed] **else_output** *'COM(ETCI) is not enablingly_disclosed'* ∧ **stop;**
3) If [COM(ETCI) is (E-definite∧E-complete∧uniquely_defined∧useful)**] then_met *Biosig*** **else_output** *'COM(ETCI) is not (useful ∧ definite)'* ∧ **stop;**
(the ETCI's claim interpretation: Closing Remark same as in FIG1.2 — yet now also O-/A-/E-notional resolution alias refinement)
4) if [scope(E-crCS^{TT0}) ≠$^{+}$ Φ] **then_met *Bilski*** **else_output** *'COM(ETCI) is not comprising an nPE TT0'* ∧ **stop;**
5) if [([]^{TT0}scope(E-crCS^{ETCI}) ⊆ scope(E-crCS^{TT0})] **else_output** *'COM(ETCI) is not an application of the nature of TT0'* ∧ **stop;**
6) if [(E-crCS^{Alice} ≠ Φ)] **then_met *Alice*** **else_output** *'COM(ETCI) is not significantly more than TT0'* ∧ **stop;**
7) if [([]^{TT0}scope(E-crCS^{ETCI}) ⊆ scope(E-crCS^{TT0}))∧(E-crCS^{Alice} ≠ Φ)] **else_output** *'COM(ETCI) is not limited preemptive'* ∧ **stop;**
(in the ETCI's claim construction by §§ 101: As in FIG1.2 — yet now also meeting the Bilski & Alice requirements, testing the ETCI's PE, i.e. its patent-eligible)
8) if [∀ϵ{E-crC0nk | 1≤n≤N ∧ 1≤k≤K^{n}} are independent of each other] ***<need not recog.>*** **else_output** *'COM(ETCI) is not independent'* ∧ **stop;**
9) if [∀^{i,n,k}∃Δ^{i,n,k} **::=** if (E-crCink = E-crC0nk) 'A' else 'N] ***<need not recog.>*** **else_output** *'RS is not definite over ETCI'* ∧ **stop;**
10) if [∑$^{1≤n≤N}$ (min$^{∀i∈[1,I]}$ |{<Δ^{i,n,1}="N", ..., Δ^{i,n,Kn}="N">}|)≥2] **then_met *Graham*** **else_output** *'COM(ETCI) is not patentable over RS'* ∧ **stop;**
(in the ETCI's claim construction by §§ 102/103: As in FIG1.2 — yet now also meeting the KSR & Graham requirements, testing the ETCI's patentability, i.e. its satisfying 35USC/SPL)
output *'COM(ETCI) satisfies SPL'* ∧ **stop.** **FSTP-Test- stop**.

FIG1.4': The ETCI's FSTP-Test in ^{IDL}KR is of post-*MBA* era, i.e. of rational & total mathematical quality[3)]

Prior to starting the FSTP-Test[3)] for an ETCI or PTR[1.h)], or iteratively after this start, a human tester must derive from this ETCI's specification (and potentially from its RS) a tentative COM(ETCI). In the above 4 ^{nIDL}KRs COM(ETCI) comprise only its (O-)inC0S[354,355] and in the 4 ^{IDL}KRs additionally its A- and E-inCS, for any inC in any of the 8 KRs also its corresponding MUIS, just as its ETCI-embedded TT0 and potentially its RS'es A/N-Matrix (both for brevity omitted as evident). Any rationalized and potentially mathematized[4)] KR of an ETCI needs confirmation by its FSTP-Test — as the 4 ^{IDL}KRs show, while for the 4 ^{nIDL}KRs this rationalization and potential mathematization is impossible[2)]. The 4 ^{IDL}KRs show that an ETCI is checked by the FSTP-Test for its satisfying the refined SPL in semantically independent[4)] ways — more precisely: by 9 independent tests of 9 independent aspects of the SPL semantics embodied by the ETCI (as FSTP-test7 evidently is a logical conjunction of FSTP-test5 and FSTP-test6, hence is dependent on the both of them[3)], i.e. must not be counted twice when determining an ETCI's semantic height over RS)[4)]. This in "CTCI patent thinking" hitherto unneeded scrutiny thus tells:

[3] While the above main text surveyed the 8 KRs1.1-1.4', this ftn[3)] outlines key details/aspects of these KRs' definitions: ***ftn[3)] continued***

The Supreme Court is by Constitution entitled to interpret SPL by its *MBA*-framework in favor of ETCIs. But many patent practitioners feel it is metaphysical. Yet this is false! Any IDL proves: **The semi-automatic application of the FSTP-Test on ETCIs is next to trivial, extremely practical, rational/mathematical, and totally robust!** And: Nothing of all that goes without the ETCI's *MBA*-framework[4)].

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ftn[3)] continued Upfront 4 remarks are helpful in avoiding misunderstanding in the cognitive highly topical analysis — triggered by the Supreme Court's *MBA* framework in the FSTP-Project, underlying this paper — of rational[4)] interrelations between 35 USC/SPL, ETCIs, and the current state of development of AIT[2]: **1.)** Neither the ●disaggregation of a given patent and the ETCI it specifies into its whatever elements and their properties (comprising their mutual interrelations just as those to the nPE posc and prior art) nor ●their descriptions implied by the *MBA* framework need to be — and often are — unique, even if their paradigms to be used are prescribed implicitly only (what the *MBA* framework implies). **2.)** Any of the hints quoted under one KR may apply to several other of the 8 KRs, too, following or preceding the former KR. **3.)** The title of any of the 8 KR-Boxes briefly characterizes its content by a catchphrase segment. **4.)** For typo fixes & more explanations see[373,182].

● **FIG1.1** All notions used by the 8 KRs' definitions are confirmed by the "**P**erson of **P**ertinent **O**rdinary **S**kill & **C**reativity, **Pposc**".

As explained in[355], the notion of 'limitation' as broadly used by the patent community (here in the 4 nIDLKRs) is not definable – probably being the main reason that the *MBA* framework requires basing the descriptions of an invention (i.e. of its properties) on the definable notion '(inventive) concept(s)', as done in IT System Design since 50 years — nevertheless rejected by the patent community until today. Yet this conflict can be easily eliminated by axiomizing the term 'limitation' to mean 'inventive concept', as explained in[5.a)].

KR1.1 is presented thereby as a riminder of the well-known non-refined classical SPL satisfaction test that is still unaware of any ETCI's inevitable peculiarities for excluding that it would put the US patent system into jeopardy. Initially these peculiar notions introduced into the SPL by the Supreme Court's *MBA*-framework have been very nebulous, yet in the FSTP literature elaborated on them since this FSTP-Project was started, immediately after the Supreme Court's *KSR* decision, for clarifying their meanings and building an IES[352] around them. This clarification basically means: Tightening Kant's broad notion of 'Aufklärung' to today's needs in describing inventions, i.e. to his famous 'mathematizability testimonial'[378] — in more detail: in precisely drafting ETCIs according to the 'SPL *MBA*-framework interpretation' by the Supreme Court, for short: in precisely drafting ETCIs in FSTP-IDL.

● **FIG1.2** KR1.2 shows, how the KR1.1 of the classical SPL satisfaction test (i.e. of FIG1.1) is expanded by the Supreme Court's *MBA*-framework if the latter's notion of inCs, is ignored. Indeed, this key notion of an 'inC'— introduced into SPL (for ETCIs) by the Supreme Court's *Mayo* decision — is strongly disliked by the USPTO just as the other *MBA*-framework introduced notions (quoted in the '*Bilski*&*Alice* section' of an ETCI's KR of FIG1.2): In spite of the fact that the inC notion being introduced by the *Mayo* decision, applied in the Supreme Court's *Myriad* decision, and refined in its *Alice* decision, and in spite of in the latter's hearing the Supreme Court clearly stated that it expects appropriate refinements of its then earlier framework-decisions' notions to be provided by the patent community[378]. Instead, the USPTO did not even mention them in its 'Interim (Patent) Eligibility Guideline, IEG'[378] that the USPTO released shortly thereafter — not to mention that it oughtat least to have clarified these *MBA*-framework notions therein, especially the notion of an ETCI's inC(s) — evidently expecting these indeed semiotic SPL notions introduced by the Supreme Court into legally dealing with ETCIs would sooner or later fade away, as allegedly being meaningless.

As consequence of this ignoring the *MBA*-framework notions therein, they evidently are still considered by the patent community to be too metarational, as defined here. Yet the Supreme Court nowhere indicated that the notion of inventive concept should by abandoned again, but repeatedly confirmed that such refinements are to be developed "**in the light of the *Mayo* and *Myriad* framework**" that it consequently — as the CAFC ignored this directive — eventually developed on its own with *Alice*. It thus provided further hints that its refinement should resemble this key notion of thinking as known since Aristotle and broadly used in the late 60s in the then young IT-technique of 'System Design'. The explanation in FIG1.2' of which of these 6 framework-decisions by the 10 FSTP-tests checks which of the 9 independent semantic aspects of the SPL-tested ETCI would remove nothing of this allegedly speculative Metaphysics, mistakenly felt to control the *MBA*-framework.

Indeed, the only systematic way known until today to break down Metaphysics and Metarationality to Rationality and eventually to Mathematics, as postulated by Kant[378], is known from System Design[2] and there called "**separation of concerns**"[278] — here achieved by splitting an invention into ETCI-elements, disaggregating any of their 'original' properties into a conjunction of 'elementary' properties (usually via its intermediate refinement into a conjunction of 'abstract' alias predicatable, i.e. formalizable properties[91,182]), and finally layering any abstract and its elementary properties' predicates alias description, i.e. this ETCI-elements' complete conjunctive lattice of "**use hierarchy**" structured description, into what here is called its 'O-/A-/E-levels description' (by a conjunctive lattice of notions of refining resolutions).

●**FIG1.3** Let a set S1 be '**independent**' of a set S2, iff ∄S1*⊆S1 such that ∀s1*∈S1* ∃ a Pposc-known function F^{s1*} such that s1*=F^{s1*}(S2).

The A/N-matrix that any IDLPTR comprises is extremely error prone as its entries are often determined without checking whether a TT allegedly found in some doc.i there has e.g. an enabling disclosure and the other 8 FSTP-Aspects — happening as a rule if TT0's claim is interpreted by the BRI[USPTO](thus rendering doc.0 irrelevant for TT0's claim interpretation), as the USPTO regularly does (recently even by a precedential decision[364], thus diametrically contradicting the Supreme Court's *MBA* framework), and often the CAFC, too[378,378].

Already in[5] was shown that for a nonpathologic ETCI all its KRs of all its COM(ETCI)s are isomorphic as to their semantic height over RS — by the same reasoning this holds also for ETCI being PE. The remaining explanations for KR1.3 are shifted into[373].

[4] The 8 KRs in total indicate by any IDLETCI's BNF that their "**FSTP-IDL**" definition[373] in the future likely is the IDL of highest popularity[182]. Thus, while the scientific thinking required for enabling this scrutiny in 'patent thinking' about ETCIs is sophisticated, the IES[352] completely hides it.

The definitions from[354/2.h)] qualifying 'human's SPL perception' of the meaning of an ETCI, of its scope, of ..., are here repeated in improved wordings for clarifying Kant's broad Aufklärungs-testimonial [354/2.b)] as to its specific meaning in SPL precedents about ETCIs[1.a)].

Next, this objectively/uniformly describing this independent incremental increase of this human perception, the common sense notion of the 'dependable understanding to a definitory degree by an ordinary human brain' is taken as delimiter of the below quality levels of such perceptions. Thereby not an artificial, scientific, and/or otherwise conditioned human brain is assumed — but only its being familiar with (besides the posc in SPL of *MBA*-framework-flavor) elementary Mathematics — i.e. elementary Arithmetic/Analysis/Algebra/Geometry/Set Theory/Logic — and with KR[2] by "**O-/A-/E-levels of refining notional resolutions**"[355] of/about such notions' below quality levels to be perceived.

Accordingly, such notions' human incremental perception as to this level-wise refined KR of such a notion — in SPL precedents about it — is initially qualified as being of ●'**metaphysical**' quality, as its understanding then is by the Pposc[3)] derived from the O-MUIS0(COM(ETCI)), then increased by notional refinement to be of ●'**metarational**' (= '**aggregated-rational**') quality, as of (meta-) atomic predicates aggregated, and finally of ●'**rational**' (= '**elementary-rational**') quality — all such increments of understanding for the Pposc disclosed by an ETCI's specification and/or its posc and/or its prior art — whereby by Kant[378] this final total KR is ●'**mathematizable**', which is achieved by an ETCI's '**axiomation**' by using an IDL (otherwise this ETCI is seen to be pathological[5,373] and is not considered here, if it should exist at all, which is extremely unlikely in the SPL context).

The meaning of any of these 3 (overlapping) human perception quality levels of an ETCI and its specified constituents is:

- **metaphysical** iff identified by all N ETCI-elements' ***O-MUIS0n's**, which denote the property alias meaning of any O-crC0n — potentially originally defining it only vaguely — by its set of "**O-Mark-up Units Identified**, **O-MUIs**" in ETCI's specification*, this meaning being subject to not being 'transcendent' or only 'highly speculative' and its vagueness to being of only 'low speculativity' and amenable to rationalization (as described next). This set of all N O-crC0n is ETCI's "**Outer Shell**" (as by the Supreme Court[315,378]) and is located on its **O-level**.
- **metarational** (= **aggregated-rational**) iff identified by all N ETCI-elements' ***A-MUI0n** ≡ O-MUI0n — the latter a priori statable more precisely by an A-crC0n than by the O-crC0n (and quite precisely statable after having determined A-crC0n's conjunctive, in COM(ETCI) independent[3)], K E-crC0k's making up this A-crC0n (or the E-crC0k conjunctive and in COM(ETCI) independent mirror (meta-)atomic predicates making up this A-crC0n's mirror meta-predicate)* — which determines of any of the N A-crC0n its property alias meaning and is located on its **A-level.**
- **rational** (= **elementary-rational**) iff identified by all K' atomic and K'' meta-atomic (with K'+ K''= K) E-crC0k mirror predicates' ***E-MUI0k** is defined ∀k' a piori by posc and ∀k'' by an axiom (defined such that it encapsulates also its for any k'' in crCS0-AXIOMs-IDLLib given low Metaphysics, thus rationalizing it[373]) — which determines of any of the K E-crC0k its meaning and is located on its **E-level**.

NOTE: The crC0S-AXIOMs-IDLLib[1.f)] may seem to split of the ETCI's E-level — in its 'use hierarchy'[278] defined by its O-/A-/E-hierarchy — an it supporting M-level, comprising the same items as the E-level, yet in their mathematical KR. But this is false, as this M-layer is not a notion 'refining' layer, but a notion 'précising' layer of the E-layer — similar to the relation between ETCI's O- and A-levels — i.e. logically irrelevant for SPL, as it nowhere (once its crCs' independence is guaranteed, which is achieved by its ETCIs' E-levels) requires this additional notional preciseness. I.e., In particular the *MBA*-framework gets along without it — it needs no mathematization of SPL precedents about ETCIs — though using the just summarized advantages on top of the such decisions making the IES without its internal mathematization is impossible.

III. THE AFTERMATH: Enormous EFFICIENCY INCREASE for all PTOs and R&D-GROUPs

By Section II the FSTP-Test is THE silver bullet in drafting&testing an ETCI for total robustness. By contrast, this Section III clarifies the two fundamentally different alternatives for ETCIs' FSTP-tests: To this end, it briefly outlines the basis for identifying and estimating in[373] the total amount of functionalities a human must inevitably execute on an ETCI for verifying that it satisfies SPL — i.e. for generating the J LACs of[1.f)] — by considering 8 different exemplary ETCI-KRs, 4 nIDLKRs and 4 IDLKRs:

- On way1, in freestyleETCI's freestyleFSTP-Test — to be performed freehand by the human tester and he/she therefore must understand in detail and completely, thereby avoiding any semi-automatic service and accepting that this test is of 'good will' quality, only, i.e. metarational at best if not metaphysical — as well as
- on way2, in this IDLETCI's vastly mathematized IDLFSTP-Test — there to be semi-automatically performed by the human tester, as this test's results are proven to be mathematically correct upfront iff the ETCI passes it and he/she therefore need not understand this test's working.

These two ways of executing an ETCI's FSTP-Test evidently are the ●manufacture-like/pre-industrial/pre-scientific way1[b)] (currently implemented by the IES prototype, for a few friendly testers open over the Internet from June 2017 on), and the ●semi-automatic/post-industrial/AIT-scientific way2 (planned for Q4/2017), **not requiring the tester to (fully) understand the ETCI or the FSTP-Test**.

In more detail: Using a freestyleETCI requires the human tester to fully understand this ETCI per se & the subtle but decisive intricacies of refined SPL & the FSTP-Test's implementation — exceeding the usual human capability to think dependably. But this 'human capacity bottleneck' may be avoided right from the outset by using mathematically proven correct[354,355] IDLKRs[373]: This enables relieving the tester from all 'understanding requirements' by leveraging the 'semi-automatic IDLETCI total robustness testing' capability of the IES. The only residual risk (existing in freestyle, too) then is the ETCIs' correct definition of the 'necessarily by a human to provide' aspects of defining ETCIs' facts[373].

Thus, thinking about other issues — in an IDLPTR's[373] IDLFSTP-Test — than its few 'necessarily human-provided facts', in particular axioms[4)], is totally superfluous. Moreover, the IES may have already upfront all its (final number of) results stored in a data structure PTR-DS[7] and then additionally all involved programs and their data audited to be correct. I.e.: **Committing a legal error in applying the IDLFSTP-Test to an IDLETCI is excluded** (also after having dynamically correctly input to it the necessarily human-provided ETCIs' facts, i.e. also if not having them pre-checked stored in the PTR-DS). And: Also recognizing incorrect fact definitions is by the IES significantly facilitated for the Pposc, as the mathematization of most such 'E-facts' starts from their 'nearby' metarational posc.

In total, the 4 main results of this paper may be summarized as follows:

- An IDLETCI's IDLFSTP-Test not only greatly facilitates drafting & testing its patent's total robustness, but also finding a potential failure in attacking its validity, e.g. by a faulty prima-facie case for it[373].
- Depending on an IDLETCI's crCS-AXIOMs-IDLLib, the IDLFSTP-Test may be executed (almost) fully automatically[373], thus its result is unassailable in everyday patent business, if the IES is approved by a recognized auditor or the absolute reliability of the IES'es implementation & input is otherwise confirmed.
- As the 'FSTP-IDL' is a trivial subset of English expanded by all SPL notions, elementarily mathematized to different degrees, it likely will be instantly broadly used by the patent community.
- While the IES prototype is 35 USC/SPL based, its EPA/SPL variant[1.e)] is planned for Q2/18.

IV. ABOUT 2 "*MBA*-FRAMEWORK-LETTERS" — AND ALIKE — TO CONGRESS

There is a nice "Client Alert Commentary"[375] providing a compact survey about the trend-indicating/-making voices in the patent community, ex- and implicitly including — besides the CAFC and USPTO — in particular AIPLA[376] and IPO[377], just as clusters of IT or pharma firms, just as …. Most of them are so upset about not understanding the Supreme Court's *MBA*-framework that they now ask even Congress for relief from at least the peak of the unfortunate mistakes that the Supreme Court allegedly committed by it, the Patent-Eligibility alias §101 problem — except patent experts with a profound IT qualification, especially in System Design Technique, which disagree with this majority and send out quite positive signals about the *MBA*-framework.

The only purpose of this very brief Section is to put these voices into a ranking relation to the Supreme Court's *MBA*-framework initiative, evidently designed to break-up the standstill in adjusting the SPL to the needs of ETCIs, as the classical SPL interpretation's paradigm turned out to be far too coarse for robustly protecting by SPL the notional much more sophisticated filigree inevitably embodied by any ETCI.

To put it short: The FSTP-Technology as represented by the FSTP-Test — induced by the principles underlying the *MBA*-framework thought brought in line with the AIT[2] thinking, yet without compromising the Supreme Court's socio-economical cognitions concerning the US society and summarized in its *Mayo* opinion — provides a simple and unquestionable means for rating these voices such relations, as explained next. It namely instantly becomes evident that neither the IPO nor the AIPLA suggested modifications of the current § 101 provide any provision for excluding patenting ETCIs of unlimited preemptivity, which politically threaten to put the entire US NPS into jeopardy as socioeconomically untenable unless fair sublicensing becomes mandatory in favor of preempted ETCIs (as practiced in Europe). Yet thereby the notion of 'fair' is known to be indefinable, and thus their suggestions create another source of inconsistency and unpredictability of patent precedents about ETCIs.

By contrast, the *MBA*-framework minimizes the likelihood of an ETCI to encounter a preemption without notice by requiring that the area of admissible potential preemptions — this area must be preserved for and granted to the financial and/or personal engagement investor also in the future for incentivity reasons — must by the specification of any ETCI to be patent-eligible ●explicitly disclosed and ●precisely verified to satisfy § 112, whereby the impact of meeting these requirements on the set of all future ETCIs is a priori minimized under the cost function logically/necessarily implied by the ETCI to be patent-eligible.

None of the suggested modifications seems to comprise a faintest hint that this Solomonic cognition embodied by the *Alice's* PE analysis (representing purely mathematical thinking as envisioned by Kant[378] has been preserved as probably not recognized — just as in the USPTO's IEG interpretation by its '2-step-test' of this *Alice* analysis, just as still in part of the current CAFC PE precedents (*DDR* et al, though being correct in the *Alice* sense). In the FSTP-Test this Solomonic Supreme Court decision is covered by the 4 FSTP-test4-7, which are logically totally intermeshed with all remaining 6 FSTP-testo.

Hearsay tells that a similar phenomenon occurred in Theoretical Physics, when N. Bohr's atom model had been replaced by E. Schrödinger's one: 10 years later part of this scientific community still struggled with trying to derive Heisenberg's uncertainty relation as to an elementary particle's p and v from Bohr's simple and clear atom model — refusing to accept that the latter's deterministic paradigm simply is notionally to coarse to meet the requirements stated by the then refined Theoretical Physics. This story shows that nothing is wrong with the broad reluctance to accept the paradigm refinement that the Supreme Court (necessarily) found for meeting by SPL the requirements stated by ETCIs.

The FSTP-Project's Reference List

FSTP = Facts Screening/Transforming/Presenting (Version of 15.05.2017*))

Most of the FSTP-Project papers below are written in preparation of the textbook [182] – i.e. are not intended to be fully self-explanatory independent of their predecessors.

[2] AIT: "Advanced Information Technology" alias "Artificial Intelligence Technology" denotes cutting edge IT areas, e.g. Knowledge Representation(KR)/Description Logic (DL)/Natural Language (NL)/Semantics/Semiotics/System Design, just as MAI: "Mathematical Artificial Intelligence", the resilient fundament of AIT and "Facts Screening/ Transforming/Presenting, FSTP"-Technology, developed in this FSTP-Project.

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