Andrei Iancu's Promises of More Certainty in USPTO's PE-Decisions – Hope- or Harmful?

Sigram Schindler
TU Berlin & TELES Patent Rights International GmbH
www.fstp-expert-system.com

Summary

My 19.04.2018 paper "AI-Interpretation of US & German Substantive Patent Law (SPL) will boost R&D-Investments" was terminated in a hurry, due to a timeout for it[453]. Thus, it dealt only very briefly with its 2 final bullet points confirming the results of CAFC's recent PE-decisions in *EXERGEN* and *VANDA* – yet for vastly other than the lawful reasons.

This email shows: ●Why these 2 CAFC decisions just as the *BERKHEIMER* one, in spite of luckily being positive, contradict the Supreme Court's PE requirements**:** As the CAFC substituted the Supreme Court's well-defined PE requirements by partially undefinable PE requirements deviating from the former ones – by AI and the FSTP-Test modeled as provably correct (see Section II). ●Andrei Iancu's initial promise to give fresh impetus to the USPTO's innovations' fostering mission – by '*more certainty* [in US-SPL]', as we '*must and will apply Supreme Court law faithfully*'[466] – is in danger of shrinking to 'business as usual'**:** Through the PTO's arranging with its 2-step PE-test contradicting the Supreme Court's framework[388], instead of going for this certainty. This had been asked for[467/1.c)] by the Supreme Court, and AI has already enabled reliably overcoming the new & fundamental problems in patenting ETCIs, e.g. their PE problem[300,301] (see Section III).

I. Repetition of the FSTP-Test[453] and Its *EXERGEN's*/ VANDA's/ *BERKHEIMER*'s PE-Determination.[1.a)]

<^{rat}CI ::= rational claim interpretation in: KR^{rat} = post-*MBA*-KR-of-SPL = US-SPL-KR^{rat} = refined claiming KR^{rat} = COM(ETCI)^{rat}> input ∧ begin:
ETCI is a set of 'O-crC0S^{mphys}::= {O-crC0n ::= *IDL-sentence,* disclosed by O-MUIS0n^{mphys} ::= {n-*IDL-sentences*^{mphys}},1≤n≤N} ∪
∪ A-crC0S^{mrat} ::= {A-crC0n ::= *IDL-sentence*, disclosed by A-MUIS0n^{rat} ::= {n-*IDL-sentences*^{rat}}, 1≤n≤N} ∪
∪ E-crC0S^{rat} ::= {E-inC0k ∨ E-ninC0k ::= *IDL-sentence*, disclosed by E-MUIS0k^{rat} ::={k-*IDL-sentences*^{rat}},1≤k≤K}.'
1) if [∀(E-crC0nk ∨ E-ncrC0nk) are lawfully_disclosed as???] then go on;
2) If [{A-crC0n=∧$^{1≤k≤Kn}$(E-inC0nk ∨ E-ninC0nk), ∀1≤n≤N} is enablingly disclosed as???] then go on;
3) If [COM(ETCI) is (E-definite∧E-complete∧uniquely_defined∧useful) as???] then go on;
output 'COM(ETCI^{rat}) satisfies SPL if passes FSTP-Test in KR^{rat}' ∧ stop.

<^{mat}CI ::= mathematical claim interpretation in: KR^{mat} = post-*MBA*-KR-of-SPL = US-SPL-KR^{mat} = refined claiming KR^{mat} = COM(ETCI)^{mat}> input ∧ begin:
ETCI is a set of 'O-crC0S^{mphys} ::= {O-crC0n = *IDL-sentence*, disclosed by O-MUIS0n^{mphys} ::= {n-*IDL-sentences*^{mphys}} ∪
∪ A-crC0S^{mrat} ::= {A-crC0n = *IDL-sentence*] disclosed by [A-MUIS0n = *IDL-sentences*^{rat}]} ∪
∪ E-crC0S^{mat} ::= {E-inC0k ∨ E-ninC0k = *IDL-sentence* disclosed by E-MUIS0nk^{rat} ::={k-*IDL-sentences*^{rat}},1≤k≤K} ∪
∪ E-crC0S^{mat}_DEF::= {E-inC0k ∨ E-ninC0k axiomized mathematically by *IDL-sentences*^{math}, 1≤k≤K}'.
1) If [∀(E-crC0nk ∨ E-ncrC0nk) are lawfully_disclosed as???] then go on;
2) If [{A-crC0n=∧$^{1≤k≤Kn}$(E-inC0nk ∨ E-ninC0nk), ∀1≤n≤N} is enablingly disclosed as???] then go on;
3) If [COM(ETCI) is (E-definite∧E-complete∧uniquely_defined∧useful) as???] then go on;
output 'COM(ETCI^{mat}) satisfies SPL mathematically proven if passes FSTP-Test in KR^{mat}' ∧ stop.

^{rat}CC ::= input 'COM(ETCI)^{rat} ≡ O-/A-/E-inC0S' ∧ begin:
4) if [COM(ETCI) is based on an ^{n}PE TT0 as???] then go on;
5) if [COM(ETCI) is an application of TT0's nature as???] then go on;
6) if [COM(ETCI) is significantly more than TT0 as???] then go on;
7) if [COM(ETCI) comprises only independent E-inC0nk as???] then go on; [input COM(RS)^{rat} ≡ O-/A-/E-inCnS, 1≤n≤N]
8) if [COM(ETCI) has a definite A/N-Matrix over RS as???] then go on;
9) if [COM(ETCI) is of semantic height over RS is (≥1/≥2 if AC$^{1/≥2}$∈RS) as???] then go on;
output 'COM(ETCI)^{rat} satisfies SPL' ∧ stop.

^{mat}CC ::= input 'COM(ETCI)^{mat} ≡ O-/A-/E-inC0S'∧ begin:
4) if [scope(E-crCS^{TT0}) ≠$^{+}$ Φ] then go on;
5) if [(∏^{TT0}scope(E-crCS^{ETCI}) ⊆ ⋂(E-crCS^{TT0})] then go on;
6) if [E-crCS^{Alice} ≠ Φ] then go on;
7) if [∀ϵ{E-crC0nk | 1≤n≤N ∧ 1≤k≤K^{n}} are independent of each other] then go on; [input COM(RS)^{mat} ≡ O-/A-/E-inCnS, 1≤n≤N]
8) if [∀^{i,n,k}∃Δ^{i,n,k} ::= if (E-crCink = E-crC0nk) 'A' else 'N] then go on;
9) if [∑$^{1≤n≤N}$ (min$^{∀i∈[1,I]}$ I{<Δ^{i,n,1}="N", ..., Δ^{i,n,Kn}="N">}I)≥2] then go on;
output 'COM(ETCI)^{mat} satisfies SPL' ∧ stop.

Of an ETCI having passed the FSTP-Test[453] the next 3 bullet points show its stereotypeness. The result of this FSTP-Test then is 'markedly robust' [433,453] (alternatively called 'absolutely robust'[354,433,453]), i.e. this ETCI is legally unassailable anyway and also factually if its inputs for its crC0s are correct (and confirmed by the pposc[1.a)]). As to its PE**:**

- *EXERGEN*'s COM(ETCI) comprises in its TT0 the exceptional 'elementary creative concept, EcrC0', by its specification defined to be 'the relation between temporal-arterial temperature and core temperature' and the of it independent nonexceptional EcrC0 'a method of temperature measurement' as its 'inventive^{Alice}concept, in^{Alice}C' (opinion, p. 12).
- *VANDA's* COM(ETCI) comprises in its TT0 the exceptional EcrC0 'reducer of QTc prolongation risk' and the of it independent nonexceptional EcrC0 'patient of CYP2D6 poor metabolizer genotype' as its in^{Alice}C (opinion, page 4).

- *BERKHEIMER's* COM(ETCI) comprises in its TT0 the exceptional EcrC0 'parsing an item into searchable tag items' and the of it independent nonexceptional EcrC0 'one-to-many editing' as its in^{Alice}C (opinion, pages 9 & 14).

I.e., AI proves: ●Any of the 3 patents is PE (at least in part, i.e. for some of its ETCIs) as comprising exceptional and nonexceptional EcrC0s such that it passes the FSTP/PE-Test, and ●The dissenting opinions are wrong as is *BERKHEIMER's* PE part. Both statements are explained in Section II.

II. The SPL-Framework/PE Conformance-Test of a CAFC/USPTO PE-Decision on an ETCI's PE.[1.a)]

Section I summarized that AI takes an ETCI's PE- and SPL-testing to the higher level of socioeconomic development indicated by the Supreme Court's SPL-framework[415], which is notionally the scientific level of such testing. This is the only level enabling and guaranteeing consistency[b)] for an SPL-satisfaction test for ETCIs, i.e. is necessary & sufficient for predictability/robustness alias certainty in SPL-testing ETCIs. Section II now shows that & why the CAFC/USPTO current metarational PE-definition (hence SPL-precedents) is unable to achieve this objective, i.e. to define this scientific level.

To this end and for an ETCI, any following explanation **4)-6)** evaluates[c)] – on the semantics of this E-crC0S provided by its $^{rat/mat}$CI[f)] – the condition[d)] of the resp. line 4-6 of this ETCI's FSTP-Test and compares it to a corresponding condition in the CAFC's/USPTO's 2-step *Alice* test. This exposes the distinction of ●any (of 2) latter conditions to that of the $^{rat/mat}$CI's line 4) resp. 6), as well as the then evident distinction of the conjunction of ●the latter's 2 conditions to conditions **4)-6)**.

4) In trying to provide a guideline for its examiners on how to interpret the Supreme Court's *Alice* decision, including its term '**directed to**', the USPTO committed the fundamental error of clinging to its initial "2-step *Alice*"-test – also after it was multiply informed about its PE guideline's multiple contradictions to the Supreme Court's SPL-framework.
By its definition (and by *Alice)* the ETCI comprises an exceptional crC, i.e. either a natural phenomenon or an abstract idea (or being one)[f)]. The USPTO/CAFC 2-step test would interpret 'directed to' – and hence accept – the ETCI's application as comprising an exceptional crC, not its TT0. But this would be a legal error as contradicting *Alice's* PE-analysis, i.e. its ^{n}PE TT0.
Indeed this would not bar the then remaining totally preemptive ETCI from being patented, i.e. from being PE.

5) The CAFC&USPTO totally fail to define the meaning of the explicit requirement stated by *Alice's* PE-analysis that the '**ETCI is an application of the nature of the TT0 it is based on**' – by AI necessarily meaning $\prod^{TT0}$**scope(E-crCS^{ETCI})** $\subseteq \bigcap$**(E-crCS^{TT0})**.
The *EXERGEN* dissent assumes that the CAFC & USPTO 2-step test implicitly determines an ETCI's TT0 as anticipated by a TT0* if it is functionally equivalent to TT0, in spite of TT0* not being embodied by the ETCI. But this is a legal error as contradicting the just identified subset requirement of *Alice's* PE-analysis.

6) The Supreme Court's requirement that the ETCI "**is significantly more than TT0**" is by AI necessarily meaning **E-crCS^{Alice}≠Φ ≡ ∃ E-crC∈{E-crCS^{ETCI}\E-crCS^{TT0}} ≡ |E-crCS^{ETCI}\E-crCS^{TT0}| ≥ 1**,[f)] i.e. is well-defined.
By contrast, the CAFC's&USPTO's precise requirement is undefinable, and its vague one is much more restrictive than the just identified SPL-framework based one. I.e., their such requirement is also a legal error.

---

[1] **a.** To grasp this paper the reader is assumed to be a pposc familiar with preceding FSTP publications and with some exemplary key paradigm shifts[335] in the foundations of Mathematics, Physics, IT, … – including elementary comprehension of the Aristotelian/Kantian/Analytic Philosophies, Logic, Linguistic, and the characteristics of Classical as well as Emerging Technologies – as required for AI-based rational reasoning about ETCIs' SPL-testing[453/ftn1.a),372].
This AI is by now integrated and encapsulated into the FSTP-Test in canonical ETCI-KR[433], thus totally relieving the FSTP-Test user of being aware of this embedded AI. Nevertheless, by using the FSTP-Test he/she inevitably uses and relies on AI.
The important acronym '**pposc**' denotes the 'person of pertinent ordinary skill and creativity', as the Supreme Court (and part of the CAFC) implied[453] in *KSR* – i.e. a compound yet axiomizable notion (as metarational and hence rational)[453/A.4)].
NOTE: A notion's axiomizability, implied by its metarationality/rationality, does not require its mathematical KR, only its atomic verbal IDL-KR.

b. '**Consistency**' of an SPL-satisfiable test means: For any ETCI holds that any to this test isomorphic test has the same Y/N-result. Thereby holds: Any SPL-satisfiability test is isomorphic to an incarnation of the FSTP-Test and vice versa.
NOTE: Without this notional rigor in drafting and testing ETCIs it is impossible to guarantee the consistency of all SPL-tests!!!

c. Focusing on conditions 4-6 only in an ETCI's PE test would be inadmissible (i.e. a serious legal error), as this ETCI's FSTP-Test evidently shows: If COM(ETCI) cannot pass one of its 9 conditions it is immaterial whether it passes the remaining 8. But this focusing is irrelevant in simplifying showing that the 3 CAFC decisions don't meet the Supreme Court's framework requirements.

.d While the DEF-line in the ^{mat}CI is explained in[440,457,182], the 3 lines of the ETCI's O/A/E-KR are briefly explained next in[2.a)].

.e The meanings of the lines 1 & 2 in the $^{rat/mat}$CI conditions – identified by '**[…]**' – is trivial. For the 'uniquely defined' meaning in line 3 see[113].

.f This is verbally & mathematically rationally testable with the condition 'COM(ETCI) is based on an ^{n}PE TT0',abbreviated by 'scope(E-crCS^{TT0}) ≠$^{+}$ Φ'.
Determining the meanings of the remaining 2 mathematical conditions of the ^{mat}CI assumes the independence of E-crC0S^{ETCI}.

.g For the basic meaning of the notional O/A/E-KR refinement of an ETCI – defined obeying everybody's everyday experience – see the ANNEX.

.h As the USPTO (followed by the CAFC) didn't refine the ETCI's O-KR – necessary for rationalizing[453/A.a] the metarational notions of the Supreme Court's SPL-framework – they could not recognize that the meaning of the *MBA*-framework's O-level notion 'directed to' has the rational meaning explained by **4)** above, i.e. is the conjunction there of the ETCI's atomic E-cr0s, as these don't exist on the O-level.

III. Andrei Iancu's View of the USPTO's Mission Concurs with the Supreme Court's Patenting Decisions.

Section II summarized the serious legal errors in the 3 most recent CAFC's PE decisions. They would have been avoided if the CAFC had used AI[453/1.a)] to interpret the Supreme Court's SPL-framework[2.a)]. Quite generally, in the CAFC's decision making about ETCIs' PE and in the USPTO's IPRs thereto, this absence of 'automated AI' – outlined in[1.a).b).h)/2.b)] – has caused the bulk of the many disastrous recent such decisions of both institutions. This Section III now elaborates on the second bullet point of the Summary, i.e. on the question about the impact on this US-NPS situation by recent pertinent Supreme Court decisions, especially by the new USPTO director.

In this situation, Andrei Iancu's keynote address "*Role of the US Patent Policy in Domestic Innovation and Potential Impact on Investment.*" to the AmCham on 11.04.2018 was perceived by all commentators of the US patent community as a strong breath of fresh air – not only as to the USPTO's carrying part of the responsibility for the US national wealth, but also in its performing everyday business. Here his clear words focused on the USPTO's two currently most problematic areas: The large number of difficulties of ●its examiners with PE/§101 and ●its PTAB with IPRs, primarily so implied. These words promised a strong director of the USPTO for whom no dream is too big as he is going to make his office to unleash the power of innovation.

This objective is indeed achievable by this director: As the Supreme Court with its SPL-framework has indicated the course to it[453] – being recognizable if this framework is really carefully interpreted[b)], as guaranteed through the use of automated AI to this end. To achieve this objective of multiplying the nation's creativity and productivity – in developing/generating/controlling emerging technology based processes and/or their physical implementations – FSTP-Technology has been derived in this AI-way, right from its outset, especially its 'Innovation Expert System, IES'.

As reports about the amazing technical and logical and SPL potentials of the IES have been reported already on several international IP and ordinary or mathematical AI conferences (see the following FSTP-Reference list), these are here exemplarily just quoted: E.g. its capabilities outlined in Section II. Therefore the following lines focus on the IES'es extremely useful and very innovative practical feature: Its end-to-end SPL-testing of an ETCI in two- or multipoint mode – i.e. cooperatively between an inventor and his/her patent drafting patent lawyer, or between an examiner and a patent applicant, or a patent licensee and a licensor of it, or a group of examiners/lawyers/judges analyzing another party's ETCI (or CTCI) patent, or ….

The IES prototype is already accessible to friendly testers – fully operational, comprising the *DDR*, *Myriad*, and *Berkheimer* ETCIs in framework-based interpretation and for training education purposes, yet only in client/server mode. At the latest by the 01.07.2018 the IES prototype's at least pairwise end-to-end operations should become available. Then the USPTO, patent law firms and alike would be welcome as friendly testers – potentially interested parties

---

[2].**a** These are its 6 'SPL-framework', the *Teva*, and most recently the *Oil States* and *SAS* decisions. The US-SPL as such is not changed by *Teva, Oil States*, and *SAS*; they hence don't directly impact on the FSTP-Project.

Yet by *Teva* – and also by *TC Heartland* – a diversity of SPL-adjudication may arise, and by *SAS* the amount of work that the PTAB is going to encounter will be evidently increased. And both these aspects will with all likelihood increase the need of automated SPL-AI (see Section II[ftn1.x]) for increasing the US-wide homogeneity of district courts' SPL-precedents about ETCIs (in line with the USPTO's decisions) and decreasing the resp. work load arising at the USPTO's examiners and administrative judges, just as at the CAFC.

.b The reason for sloppy interpretation being that in most cases there is no awareness of this deficiency as the absence of (the use of) AI cannot be compensated by the intellectual brilliance evidently owned by many examiners/lawyers/judges involved. These namely have not been drilled in rigorous analytic alias rational[453/3.c)] thinking practiced by AI as needed here[453/1.a)] – which is totally counter-intuitive, i.e. nonnatural, hence is usually not dependably exercisable by them.

Thus, the only way out is to automate the application of AI in testing an ETCI for satisfying SPL's PE-requirements, as explained in[1.a)] – why the IES is based on the FSTP-Test being totally AI-embodying, from its design to any of its details.

By the way: That most of the negative patent decisions is caused by difficulties in prior art identification in due time is totally unsubstantiated in all negative PE-decisions of the CAFC and probably all such USPTO decisions. Their stereotype references to the pposc[1.a)] cannot compensate this deficiency without exemplifying such prior art (never occurring, evident in any such DNAtech-ETCI decision).

.c Nobody can recognize the absurdity of trying to improve the PE guideline – and the current mess SPL is in as to ETCIs – as long as tinkering with SPL's incomplete, hence wrong, interpretation of the Supreme Court's framework[388], i.e. if arranging with the contradiction of the '2-step PE'-test to the Supreme Court's framework[467] (shown by Section II). This would be not the straightforward way that Andrei Iancu (implicitly) promised to find and go, but is the 'business as usual'-way meandering in a logical nirvana, but not unleashing the socioeconomic power of the US society's innovativity.

would be invited to engage in reimplementing parts of the IES prototype and/or establishing a business case around it. The FSTP-Project then should continue scientifically clarifying future innovations of Innovation-Technology[182].

As to this question, one of the above mentioned commentators expected that the PE-battle "*is far from being over*"[464]. History teaches more definitively[335]: Once big advantages of a new paradigm are unquestionable – such as the SPL-framework's ones and demonstrated by the IES – it will be broadly accepted, as by the Supreme Court required and by Andrei Iancu envisioned.[463]

The FSTP-Project's Reference List

FSTP = Facts Screening/Transforming/Presenting (Version of 03.05.2018*))

Most of the FSTP-Project papers below are written in preparation of the textbook[182] – i.e. are not 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 & MKR: "Mathematical Artificial Intelligence & Mathematical Knowledge Representation", the resilient fundament of AIT and "Facts Screening/Transforming/Presenting, FSTP"-Technology, both developed here.— currently most of it still being in 'status nascendii'[182]

[5] S. Schindler: "Math. Modeling SPL Top-Down vs. Bottom-Up", Yokohama, 2012*)

[9] **.a** S. Schindler, "Patent Business – Before Shake-up", 2013*).
.b S. Schindler, "Patent Business – Before Shake-up", 2015*).
.c S. Schindler, "Patent Business – Before Shake-up", 2018, to be publ. soon.

[64] B. Wegner, S. Schindler: "A Mathe. Structure Modeling Inventions", Coimbra, CICM-2014*).

[69] USSC, Transcript of the oral argument in *Alice* Corp. v. CLS Bank, 31.03.2014*).

[91] B. Wegner, S. Schindler: "A Math. KR Mod. for Claim Inter..& Con.", in prep.

[113] S. Schindler: "The CAFC's Rebellion is Over – The USSC, by *Mayo*/*Biosig*/*Alice*, ...", publ. 07.08.2014*).

[130] G. Frege: "Function und Begriff", 1891.

[157] USPTO: "2014 Int. Guidance on Pat. Subj. M. Eli. & Examples: Abs. Ideas"*).

[160] S. Schindler: "The USSC *Mayo*/*Myriad*/*Alice* Decisions, The PTO's Implementation by Its IEG, The CAFC's *DDR* & *Myriad* Recent Decisions"*), publ. 14.01.2015*), its short version*), and its PP presentation at USPTO, 21.01.2015*)..

[182] S. Schindler: "Innovation Theory and Mathematical AI Based Patent Technology", Textbook, in prep.

[218] B. Russel: "Principles of Mathematics", see also Wikipedia.

[278] a.) D. Parnas: Personal Communications, Berlin, 1975.
b.) D. Parnas: "Software Fundamentals", ADDISON-WESLEY, 2001.

[296] S. Schindler: "A Com. on the 2016 IEG Update – Suggesting More Scrutiny ", publ. on 09.06.2016*).

[312] R. Bahr, USPTO: MEMO as to "Recent Sub. Matter Eligibility Rulings", 14.07.2016*).
[313] **a.)** Wikipedia: "First-order logic", **b.)** Wikipedia: "Prädikatenlogik", **c.)** Wikipedia: "Analytic Philosophy", **d.)** Wikipedia: "D. Parnas".

[314] J. Duffy: "Counterproductive Notice in Literalistic v. Peripheral Claiming", U. of Virginia, June 2016*).

[332] S. Schindler: "The Notion of Claiming in SPL – pre&post Aufklärung", p. 10.10.2016*)

[335] T. Kuhn: "The Structure of Scientific Revolutions", UCP, 1962, see also Wikipedia

[348] B. Wegner: Invited paper, "Innovation, knowledge representation, knowledge management and paper, "Math. Modelling class. math. thinking", Corfu, Ionian University, 22.11.2016*)
[349] B. Wegner:: "Robust Claim Interpretation and Claim Construction for an ETCI, - Steps of a "Mathematical Theory of Innovation"", Bangkok, ICMA-MU, 17.-19.12.2016*)
[350] S. Schindler: "The IES Qual. Machine: Prototype Demo", GIPC, New Delhi, 11.-13.01.2017.
[351] B. Wegner: "FSTP – Math. Assess. of ETCIs' Quality", GIPC, New Delhi, 11.-13.01.2017*).
[352] D. Schoenberg: "The IES Prototype Qualif. Machine", GIPC, N New Delhi, 11.-13.01.2017*)
[353] S. Schindler: "The Lesson to be Learned from the US PE Hype:", publ. 11.12.2016*).
[354] S. Schindler: "An Amazing SPL Cogn.: Any Pat. Appli. is Draft, Tot. Rob.", publ. 31.01.2017*).
[355] S. Schindler: "An Ama. SPL Cogn.: Any Pat. Appli. is Draft. Tot. Rob.", publ.07.03.2017.

[360] IA (Internet Association*): "Letter to the President-elect Trump",14.12.2016*)
[361] J. Straus: „Intellectual Property Rights and Bioeconomy", Journal of IP Law&Practice, 14.07.2017
[362] USPTO/PTAB: *Ex parte* Schulhauser, 2016,*)
[364] S. Schindler: "The PTAB's Schulhauser Dec. is Untenable", publ. 08.03.2017*)
[367] P. Michel, et al."The Current Patent Landscape in the US&Abroad", 12th APLI, USPTO, 09.-10.03.2017*).

[371] Wikipedia: **a.)** "DSL", **b.)** "Compiler", **c.)** "BNF", **d.)** "Analytic Philosophy", **e.)** "Axiomatization", **f.)** "Memory", **g.)** "Prion".
[372] S. Schindler: "'IDLs" & KRs, and Easily Drafting&Testing Patents for Their Total Robustness', publ., 16.05.2017*)

[374] Justice Thomas: Friendly Comment, 04.12.2015*)
[376] AIPLA: "Legislative Proposal and Report On Patent Eligible Subject Matter", 12.05.2017**)
[377] IPO: "Proposed Amendments to Patent Eligible Subject Matter", 07.02.2017*)

[383] B. Stoll: "101 in the Future", AIPLA, 17.05.2017*)

[388] USSC, Decision in Heartland v. Kraft, 22.05.2017*).

[390] S. Schindler: "The Recent AIPLA Meeting's ... Nationwide §101-Guidelines ...", publ., 14.06.2017*)
[391] S. Schindler: "ANNEX[391] to[390] — Trivializing and Semi-Automatizing ETCIs' SPL-Satisf.-Tests")
[392] S. Schindler: "The FSTP-Test and the *DDR*'s ETCI Recon. — as Model Case", in prep.
[394] S. Schindler: "IDL & Knowledge Rep.s.", IRRP'17, Orlando, 08.-11.07.2017.
[395] S. Schindler: "IDL & Knowledge Rep.s", IKE'17, Las Vegas, 17.-20.09.2017.
[396] S. Schindler: "IDL & KRs", GCKE-2017, Qingdao, 19.-21.09.2017.
[397] CAFC, Decision in ARIOSA v. SEQUENOM,"12.06.2015*).
[398] CAFC, Denial on Pet. for Hearing en Banc in. SEQUENOM vs Ariosa, 02.12.2015**).
[399] USSC, PfC in SEQUENOM v. ARIOSA, 21.03.2016*) , DENIED on 27.06.2016.
[400] S. Schindler: "MEMO: Sequenom — An Incomplete Interpretation of §101/Alice by the CAFC, Sequenom's PfC Misses the Point, USSC's Denial Consequ.", 17.07.2017*)
[401] S. Schindler, tbd: "Axiomatization of (non)Exceptional E-.crCs", in prep.,
[402] S. Narayan: "On the Micro Biome", 2017 FCBA Conference, 22.06.2017*)
[403] P. Jeng, J. Jeng: "Parallel Pred. of Stock Volatility", WMSCI2017, 09.07.2017*)
[404] J. Duffy: "The USSC and Biosimilar Litigation: Amgen v. Sandoz", CASRIP, 10.07.17*)
[405] P. Morris: The Latest Developments in CRISPR-Technology", CASRIP, 10.07.2017*)
[406] S. Schindler: "The PE-Theorem, FSTP-Test, and the US Innovation Econo. ... ', publ. 01.08.2017*)
[407] USPTO: "PATENTELIGIBLE SUBJECT MATTER: REPORT ...", 25.07.2017*)
[408] C. Coons, T. Cotton, D. Durbin, M. Hirono: "Stronger Patents Act 2017", 21.06..2017*)
[409] S. Schindler: "MEMO about the §112 Enabling Requirement with ETCIs", in prep.
[410] S. Schindler, tbd: "Automatic & Correct Transl. of (non)Exceptional E-.crCs", in prep.
[411] D. Kolker:"USPTO Guidel. on Subject Matter Eligibility", BCBCP Partnership Meet., 02.08.2017*)
[412] J. Chambers: "Stakeholders' Perspectives on S.M Eligibility", BCBCP Partner. Meet., 02.08.2017*)
[413] J. Cohan: "S.M Eligibility", BCBCP Partnership Meeting, 02.08.2017*)
[414] L. Fischer: "S.M Eligibility", BCBCP Partnership Meeting, 02.08.2017*)
[415] S. Schindler: "The USPTO's §101/Biotech WS: Its PE-Test is Too Vague ...", 12.09.2017*)
[416] G. Nickol: "Update on Cancer Immunotherapy Program", BCBCP Partnership Meet., 30.08.2017*)
[417] D. Nguyen: "WIPO Standard ST.26(Nucleotide and Amino Acid Sequence", BCBCP, 02.08.2017*)
[418] USSC PfC: Synopsis
[419] USSC PfC: Amdocs
[420] CAFC-pending: *Burgos* ,
[421] CAFC, Decision in *Visual Memory*, 15.08.2017*)
[422] C. Shannon "A Mathematical Theory of Communication", 1948.
[423] S. Schindler: "The CAFC's Biotech/PE-Decisions — Reconsidered for the R&D-Investor Community", publ.15.10.2017*)
[424] P. Michel: Comment on the BRI and Consistency, at recent Congressional hearing*).
[425] N. Kelly, USPTO, 25.09.2015*)
[426] L. Fischer: "IP & Diagnostic Symposium", Alexandria, 29.09.2017*)
[427] H. Sauer: " IP & Diagnostic Symposium", Alexandria, 29.09.2017
[428] W. Woessner: " IP & Diagnostic Symposium", Alexandria, 29.09.2017*)
[429] J. Cohan: "IP & Diagnostic Symposium", Alexandria, 29.09.2017
[430] E. Haug: "FCBA Global Series – Euro. 2017 Session", London, 25.-26.09.2017
[431] L. Coury, M. H. Furman, L. Jakob: "Biologic and Biosimilar Litigation – Recent Developments", FCBA Bench & Bar in Dialogue, New York, 4.10.2017
[432] Judge R. Taranto, Judge A. Lourie, Chief Judge S. Prost, Judge J. Reyna: "Discussion with the Judiciary", FCBA Bench & Bar in Dialogue, New York, 4.10.2017
[433] S. Schindler: "An SPL's ETCI is 'Dig.' iff it is Totally-Rob. — Espec. PE.- *Oil* States", publ. 05.10.2017,*)
[434] S. Schindler: "Getting Famil. with the IES by Testing its Prototype_V.x, x≥1", in prep.
[435] P. Leahy, IPAS 2017, Intellectual Property Awareness Summit, 06.11.2017, Chicago
[436] P. Ludwig, AIPP 2017, Sydney, World C., M. Pharma2: Injunctions: innovator vs. innovator, 16.10.2017
[437] J. Lefstin, P. Menell, D. Taylor: "Final Rep. of the Berkeley Center for Law & Tech. Section 101 Workshop: Addressing Patent Eligibility Challenge", Berkeley Tech. Law Journal, 2018 Forthcoming
[438] USSC, Brief of Federal Respondent (USPTO) in Oil States Energy v. Greene's Energy*)
[439] R. Rader: Pers. Communication, Chicago, 06.11.2017.
[440] S. Schindler: "The Supreme Court's 'Outer Shell'-Specification of an ETCI – Digitizing & Mathematizing It .& The Semi-Automatic FSTP-Tests by the IES of ETCIs for Satisfying SPL– *DDR, Myriad, Sequenom, GTG.* & The German SPL-Precedents Implies the Supreme Court's SPL-Framework – Political Issues.", pub. 20.01.2018*)
[441] S. Schindler: "OA/E/M — An ETCI's 4 Use-Hierarchy-Levels", in prep.
[442] P. Michel: Pers. Communication, Alexandria, 30.08.2017.
[443] D. Schoenberg, J. Schulze, J. Wang, C.Negrutiu, B. Wegner, R. Wetzler, S. Schindler, "The User Interface Design of the IES for Testing an ETCI's Satisfying SPL", 23.01.2018*)
[444] D. Schoenberg, J. Schulze, J. Wang, C.Negrutiu, B. Wegner, R. Wetzler, S. Schindler, "The IES GUI – A Primer: Using the FSTP-Test, Inhouse Mode", 23.01.2018**)
[445] B. Wegner, "A Mathematical KR Model for Claim Interpretation and Construction", 23.01.2018**)
[446] R. Stoll (on IP Watchdog): „Director Andrei Iancus Act One", 26.11.2017
[447] R. Katznelson: „Private Patent Rights, the Patent Bargain and the Fiction of Administrative "Error Correction" in Inter Partes Reviews", 04.12.2017
[448] H. Goddard, J. Strauss: Pers. Communication, Berlin, 20.12.2017.
[449] S. Schindler: "..... tbd .....", in prep.
[450] E. Kandel: "Auf der Suche nach dem Gedächtnis.", Random House, 2006.
[451] S. El-Metwally, O. Ouda, M. Helmy: "Next Generation Sequencing Technologies and Challenges in Sequence Assembly", Springer, 2014
[452] CAFC, Decision in Finjan v. Blue Coat Systems, 10.01.2018*).
[453] S. Schindler: "AI-Interpretation of US & German Substantive Patent Law will Boost R&D-Investments", publ.19.04.2018*)
[454] CAFC, Decision in EXERGEN, 08.03.2018*)
[455] MPEP-2018, 25.01.2018
[456] S. Schindler: "Short Artificial Intelligence Comment on MPEP2018_SECT2106 – NO IMPROVEMENT.", published on 26.02.2018*).
[457] B. Wegner, S. Schindler, et al.: "Mathematizing Any Rationalized Elementary Inventive Concept of an ETCI", in prep.
[458] S. Schindler: "Comment on the Absurdity of §101 in MPEP-2018_Sect2106.", 16.03.2018*).
[459] S. Schindler: "Andrei Iancu's Promises of More Certainty in UDPTO's PE-Decisions – Hope- or Harmful?", this paper*)
[460] USSC, Decision in Oil States, 22.04.2018*)
[461] USSC, Decision in SAS INSTITUTE, 24.04..2018*)
[462] K. Noonan, PATENT DOCS, 11.03.2018*)
[463] A. Iancu: Statement before the Committee on the Judiciary U.S. Senate: "Oversight of the U.S. Patent and Trademark Office", 18.04.2018
[464] M. Borella (PATENT DOCS): "USPTO Updates Patent Eligibility Guidance in View of Berkheimer", 23.04.2018
[465] J. Matal: Opening Keynote, BIO's IPCC 2018, New Orleans, 11.04.2018.
[466] A. Iancu: "Role of US Patent Policy in Domestic Innovation and Potential Impacts on Investment.", AmCham, 11.04.2018*).
[467] CAFC, Decision in VANDA, 13.04.2018*)

) *document and full list available at www.fstp-expert-system.com