SEMI-AUTOMATIC GENERATION OF LACs FOR A CLAIMED INVENTION UNDER SPL alias
SEMI-AUTOMATIC GENERATION / CUSTOMIZATION OF ALL CONFIRMATIVE LEGAL ARGUMENT CHAINS (LACS) IN CLAIMED INVENTIONS’ SUBSTANTIVE PATENT LAW TESTS, AS ENABLED BY THEIR “INVENTIVE CONCEPTS” USING AN INNOVATION EXPERT SYSTEM (IES)

I. PATENT KNOWLEDGE KINDs & REPRESENTATIONs
II. ABOUT A PATENT IES'es eKNOW REPRESENTATION
III. ABOUT A PATENT IES'es TESTs & ARGs REPRESENTATION
IV. LEGAL & TECHNICAL INNOVATIONS ENABLED BY IESes.


ABSTRACT OF THIS PRESENTATION’ FORMAT: SCREEN SHOTS & ABSTRACTS

For each of the 5 ‘screen shots’ belonging to the speech, there is an abstract of its oral presentation. This abstract summarizes the message conveyed by the oral presentation of the screen shot, by explaining any non-evident topic thereon in more detail – thus MAKING NOTES SUPERFLUOUS.

This speech reports about a particular activity within the FSTP project, i.e. about the eKnowledge based groundbreaking “Patent Technology” developed therein and the prototype of an “Innovation Expert System (IES)” leveraging on this new technology. I.e.: It reports only about the fundament for automatically generating / customizing ALL CONFIRMATIVE alias logically correct legal argument chains (LACs) – this fundament being the set of all arguable subtests (ASTs) of a ‘test under SPL of a claimed invention’ – and about the presentation association to such LACs as well as their invocation by the IES.

For more information about all these aspects of the FSTP project see the Reference List on its blog, All its publications are available there (if legal), i.e. on www.innovation-expert-system.com.
I. PATENT KNOWLEDGE KINDs AND KNOWLEDGE REPs

- "Patent eKnowledge" is the blue print of any precise eKnowledge as to any subject matter – such as medicine, transportation, security, nano tech, ....
- "Patent eKnowledge" is **FINITE + FOL!!!**

- Knowledge kinds, KKs, in patent business:
  - Legal kinds – Nat./Internat. patent and other laws, PTOs' and other bodies' directives, corporate/market rules, ..., mostly case independent.
  - Technical kinds – patent at issue, prior art, marketing/user/maintenance information, ..., mostly case specific.

- Knowledge kinds' representations, KKRs, in patent business:
  - documentRs – in any doc.i, as known from everyday life.
  - logicRs – to be marked-up in doc.i's as identified by the inventor/posc,
  - brainRs – showing what our brains do, though we don't know how,
  - argumentRs – sequences of mixtures of the above KKRs.

- KRs are instantiations of KKRs. From the above said follows: Any KR item is a “universe” of its own – THE issue in today’s Geometry!


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ABSTRACT OF I.

- Patents in general are very simple, allegedly precisely described, practical solutions of problems.
- As usual in engineering, they are of “first order logic” and even finite – both probably indispensable for making the patenting philosophy work.
- For designing a technology efficiently supporting patent professionals, distinguishing between 3 elementary knowledge kinds is crucial – in KR never distinguished.
- Legal argument chains (LACs) then determines the eventually required kind of knowledge, which as to its representation and its I/O is highly personalizable.
- In mathematically modeling all these KKRs and their instantiations and the relations between them, these distinctions disappear again in favor of having “the” mathematical structure for which is assessed that no logic flaws sneak into SPL precedents.
- This mathematic structure provides the basis for the mathematic FSTP-Test outlined in VI.
- The normal patent practitioner need not care for these mathematical “soundness” proofs.
- For more about using this mathematical (data) structure wait for Doerte's presentation.
II. ABOUT A PATENT IES'es eKNOW REPRESENTATION

- Above is shown a control screen shot and the 3 just explained different graphical representations, i.e. screen shots, of the 3 different kinds of information embodied by the same information.
- The LAC information is graphically here represented on the bottom lines of the control screen shot.
- The double headed arrow show examples, how the user may browse between these KKR.
- No such arrows model that the user may browse, also within one KKR, between the different documents and their peer items therein.

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III. ABOUT A PATENT IES’s TESTS & ARGs REPRESENTATION

Test 1: The FSTP-Test is executed for the set of claim interpretations, Sol, selected in (b)(c), comprising the steps:
(a) It prompts the user for the claim(ed-invention)’s and prior art’s docs with their "marked-up items, MUs";
(b) It prompts vSol and for any Sol’s vBAD-crCnA::= Sol, disclosed and used in test BAD-crCnA in doc-MUs, 0≤i≤1,Sn≤N;
(c) It prompts for the definiteness justification of v compound inCs in Sol, i.e. of vBAD-crCnA:
(d) It prompts to disaggregate vBAD-crCnA::= Sol, disclosed and used in test BAD-crCnA in doc-MUs, 0≤i≤1, Sn≤N into BED-crCnA, with K(Sol)={BED-crCnA| 1≤k≤S(K)};
(e) It prompts for the definiteness justification of its disaggregation in (d);
(f) It automatically sets K(Sol)::= Sol, disclosed and used in test BAD-crCnA in doc-MUs, 0≤i≤1, Sn≤N into {BED*,{BED-crCnA| 1≤k≤S(K)}}, with K(Sol)={BED-crCnA| 1≤k≤S(K)};

Test 2: It prompts for justifying v BED-crCns in S^{n+}: Their 

Test 3: It prompts for justifying v BED-inCs in S^{n+}: Their definiteness under § 112.6;

Test 4: It prompts for justifying v BED-inCs in S^{n+}: Their enablement;

Test 5: It prompts for justifying v BED-inCs in S^{n+}: Their independence;

Test 6: It prompts for justifying v BED-inCs in S^{n+}: Their posc-nonequivalence;
(a) It automatically sets if [RS]=0 then BED-inC0k := "dummy" else performing t-f v 1≤i≤[RS];
(b) It prompts to disaggregate v BAD-Xn into \&BED-inCnK;
(c) It automatically sets BED-inC0k := either BED-inCk or v BED-inC0k = BED-inC0k and disclosed and \&definite and enabled, else "dummy(ik)";
(d) It prompts for JUS(BED-inC0k);

Test 7: It prompts for justifying by NANO test’(NANO) on (S^{n+},P.0^{n+}): TT.0 is not an abstract idea only;

Test 8: It prompts for justifying on v BED-inCs in S^{n+}: TT.0 is not natural phenomena solely;

Test 9: It prompts for justifying v BED-inCs on (S^{n+},P.0^{n+}): TT.0 is novel and nonobvious by NANO test’(NANO) on the pair (S, if [RS]=0 then BED-inC0k|1≤k≤N, else (BED-inC0k|1≤k≤N), 1≤i≤[RS]);

Test 10: It prompts for justifying v BED-inCs in S^{n+}: TT.0 is not idempotent by NANO test’(NANO) on the pair S \subseteq S

The "Not an Abstract Idea Only, NANO" test basically comprises 4 steps, ignoring any prior art’s inventions:
1) It prompts to justify the specification discloses a problem, P.0^{n+}, to be solved by the claim(ed-invention) as of S^{n+};
2) It prompts to justify, using the inventive concepts of S^{n+}, that the claimed invention solves P.0^{n+};
3) It prompts to justify that P.0^{n+} is not solved by the claim(ed-invention), if P.0^{n+} in S^{n+} is removed or relaxed;
4) If all verifications 1)-3) apply, then this pair <claim(ed-invention), Sol> is "not an abstract idea only".

The "Novel And Not Obvious, NANO" test basically comprises 3 steps, checking all "anticipation combinations, ACs’s" of S^{n+}:
1) It automatically generates the ANC^{n+}matrix, its lines representing for any prior art document’s, i=1,2,…,I, the relations between its invention’s BED-inCs to their peers of TT.0^{n+}, represented by its columns, whereby S^{n+} derivable from any prior art documents’ invention in Sol;
2) It automatically derives from the ANC^{n+}matrix the set of (ACs’s) with the minim. number ACs’s;
3) It automatically determines and delivers <Q(MANV[ACs]), being the creativity of the pair <claim(ed-invention), Sol>>.

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ABSTRACT OF III.

The FSTP-Test consists of 10 FSTP tests, in total checking of an invention claiming protection by US patent law, whether it is patent-eligible and patentable. This is the case if it meets the 11 concerns legally encoded by SPL, i.e. by 35 USC §§ 101/102/103/112, which is the case if it passes all the 10 FSTP tests on at least one set of its BED-inCs, input by the FSTP-Test user.

To this end it prompts the user to input, for this claimed invention – assuming its claim comprises only 1 interpretation, being this invention – first its elements X0n and their inventive properties, modeled by their compound inventive concepts BAD-X0n and as many elementary inventive concepts BED-crC0nk as it is able to identify, 1≤n≤N, 1≤k≤K.

For any prior art document,i, 1≤i≤I, the in principle peer steps are taken to those in doc.0.

The FSTP-Test is decomposed into these 10 test’s such that test.1 checks 2 such SPL concerns, the remaining 9 test’s check each 1 such concern.

The FSTP-Test proceeds in this test exactly as implied by the Supreme Court’s Mayo decision.

Any test.0 prompts its user for inputting exactly all that information indispensably required such that all 10 test’s execute exactly this Mayo test. Any test.0 comprises its legal and factual aspect(s).

The concerns encoded by § 112 are checked by test.0, 1≤o≤6; those encoded by § 101 are checked by test.0, 7≥o≥8; those encoded by §§ 102/103 are checked by test.0, 9≤o≤10.

Any legally meaningful SPL argument is (equivalent to) a logical conjunction of the test.0, 1≤o≤10.

Any such argument may be generated and in realtime produced automatically – after calibration.

Any alleged such argument may be automatically recognized as T or F in realtime – after calibration.
IV. LEGAL & TECHNICAL INNOVATIONS ENABLED BY IESes

Increasingly powerful capabilities, explained by the following ladder, its "high end" known from science fiction, its spokes not being consecutive.

- Graphics/Acoustic prompting through legal q-a
- Graphics/Acoustic prompting through all reasonable q-a
- Assessing legal correctness capability – all being "self-catalytic systems"
- Self-contained interactive graphics/acoustic "responsivity"
- Realtime self-contained interactive graphics/acoustic responsitivity
- Personalizable/Moderatable realtime self-contained interactive graphics/acoustic responsitivity
- In-/Extrinsic user-counseling in realtime self-contained graphics/acoustic interactive responsitivity = self-inflammable self-catalytic system = HAL


ABSTRACT OF IV.

- Most IES functions for its "calibration"/"comfort" mode, few for its "engagement"/"combat"/"court" mode – on request working step/stream wise, also overlapping, all KR oriented.
- All the information eventually output by the IES in engagement mode is input before in calibration mode by an IES user – i.e., is already marked-up (by MUIs), or marked-up and linked, or marked-up and later linked during calibration by a user. This applies to all KRs of any information.
- In a Patent IES all the invention independent information should already carry its MUIs.
- Also MUIs to be provided by the inventor/posc are vastly stereotypic – once the invention’s inventive concepts are identified – as then the FSTP-Test [URL see below] prompts the user through the complete check whether it satisfies SPL.
- “FFOL problem power”: Adapted FSTP-Tests may check “any document for its satisfying any directive” – e.g. a new drug specification for satisfying a FDA directive.
- “blue highlight” = additional group of functions, exceeding today’s expert systems.
Reference List:


[2] “Advanced IT” denotes IT research areas, e.g. AI, Semantics, KR, DL, NL,..


[6] SSBG pat. appl.: “THE FSTP EXPERT SYSTEM”*).

[7] SSBG pat. appl.: “AN INNOVATION EXPERT SYS., IES, & ITS DATA STRUC., PTR-DS”*).


[10] SSBG’s AB to CAFC in LBC, 2013*).


[18] SSBG AB to the Supreme Court in CLS, 07.10.2013*).

[19] SSBG AB to the Supreme Court in WildTangent, 23.09.2013*).


[37] D.-M. Bey, C. Cotropia, "The Unreasonableness of the BRI Standard", AIPPA, 2009*)
[38] Transcript of the Hearing in TELES vs. CISCO/USPTO, CAFC, 8.1.2014*).
[39] Transcript of the en banc Hearing in CLS vs. ALICE, CAFC, 8.2.2013*).
[40] SSBG's Brief to the CAFC in case '453*).
[41] SSBG's Brief to the CAFC in case '902*).
[42] SSBG's Amicus Brief to the CAFC in case CLS, 06.12.2012*).
[45] SSBG's AB to the Supreme Court as to the CII Question, Jan. 28, 2014*).
[47] S. Schindler: "Auto. Gen. of All ASTs for an Inv.'s SPL Test", subm. for public.*).
[50] NAUTILUS v. BIOSIG, PFC, 2013 *).
[51] BIOSIG, Respondent, 2013*)
[52] Public Knowledge et al., AB, 2014*).
[53] Amazon et al., AB, 2014*).
[54] White House, FACT SHEET - ... the President's Call to Strength. Our Patent System and Foster Innovation, 2014*).
[55] USPTO: see home page.
[56] IPO: see home page.
[58] SSBG's Amicus Brief to the Supreme Court as to its (In)Definiteness Questions, March 3, 2014*).
[59] SSBG pat. appl. "A Patent Interpretations and inCs Minded UI of an IES".
[61] H. Wegner: "Indefiniteness, the Sleeping Giant in Patent Law", www.laipla.net/hal-wegners-top-ten-patent-cases/.
[64] SSBG's Petition to the CAFC for Rehearing En Banc in the '902 case, 18.04.2014*).
[65] CAFC: VEDERI vs. GOOGLE decision; March 14, 2014
[66] CAFC: THERASENSE vs. BECTON & BAYER decision, 25.05.2011
[67] B. Fiacco: Amicus Brief to the CAFC in VERSATA v. SAP&USPTO, 24.03.14*).
[68] Official Transcript of the oral argument in U.S. Supreme Court, Alice Corp. v CLS Bank, Case 13-298 – Subject to final Review, March 31, 2014, Alderson Reporting Company*).


[72] USPTO/MPEP: “2014 Procedure For Subject Matter Eligibility Analysis Of Claims Reciting Or Involving Laws Of Nature/Natural Principles, Natural Phenomena, And/Or Natural Products” *).


[74] T.b.d.


[76] Video of the Hearing on 09.05.2014 organized by the PTO*).


*) see www.fstp-expert-system.com