

The Meaning of Any PE ETCl's 'Application', its 'Inventive Concept', and their being Scientized<sup>1a)</sup>  
 explained by  
 Comments on the CAFC's SEQUENOM Decision & on COVID-19 — a Post Scriptum to my Mail<sup>604</sup>.

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This mail elaborates briefly on both above key notions of the Supreme Court's semiotic 'SPL-framework'<sup>a)</sup>, to the reader conveyed in<sup>604</sup>. The reason being that both these key notions are even by FSTP-savvies deficiently interpreted and in the US SPL community dramatically mystified — not to speak of the broad US patenting community.

These notions' meanings denote, of each PE ETCl, 2 key components specified by the Supreme Court (also to be by it embodied) and explained by the USPTO's PEG<sup>566</sup> (almost completely). It shows that these 2 meanings — of an 'application<sup>b)</sup>' (hierarchally<sup>FSTP</sup> using an <sup>n</sup>PE TT0, as of *Alice*'s decision being an 'exceptional concept', see its page 7 top lines) and of an 'inventive *Alice* concept<sup>b)</sup>' (therein often not comprised, but added to the ETCl for specifying the novelty of its pair <TT0, application><sup>2-a)</sup>) — are not that broad as in colloquial language: They both are by definition<sup>FSTP</sup> & their meanings must be tighter for ETCl's meeting the Supreme Court's requirements to be minimally invasive keep the ETCl's preemptivity limited. These requirements are met by a patent's CBN(ETCl)<sup>FSTP</sup>, iff this CBN's such application & such E-in<sup>Alice</sup>C (see below) are as precisely specified, as explained to be therefore necessary by the below FSTP-Test & its Legend.

\*) My thanks for discussing with me this mail go to U. Diaz, C. Negrutiu, D. Schoenberg, J. Schulze, R. Wetzler, B. Wittig.

- 1. a) FSTPtech's notions<sup>480ftn2.c)</sup> are assumed to be known, especially those with postfix <sup>FSTP</sup>. E.g.: ●Facts Screening Transforming Presenting, FSTP', ●Substantive Patent Law, SPL', ●Technical Teaching, TT', ●(SPL-)framework specified by the Supreme Court's line of 6 unanimous decisions in *KSR/Bilski/Myriad/Biosig/Alice*, ●Emerging Technology Claimed Invention, ETCl', ●FSTP-Test<sup>e)</sup> determining an ETCl's satisfying SPL, ●ComBiNation (of an ETCl's set of  $\forall O/A/E$ -crCs), CBN(ETCl)', ●h(ierarchally, u(ses).', ●basi(cally), inde(pendent)).
- b) Both key notions' meanings are reiterated by their specifics in COVID-19<sup>604</sup> & especially SEQUENOM (being much more to the point than *Berkheimer*) and for indicating the FSTP-Test's<sup>604</sup> alias SPL-AI-Test's<sup>596</sup> dramatic shortening & simplification potential of the USPTO's PEG<sup>566</sup>.
- c)

The FSTP-Test for <sup>[XXX]</sup>ETClY (copied from<sup>604</sup>, yet note its clarifications / typos in test4-7)<sup>d)</sup>

<sup>[XXX]</sup> ETCl's Claim Interpretation, CI:	<input ::= <sup>[XXX]</sup> CBN <sup>Y</sup> (claim <sup>Y</sup> ) in <sup>1S</sup> KR >	& begin:
1)	if [CBN(ETCl) is factually {O-crC0n ::= (( $\wedge^{1 \leq n \leq N} E\text{-crC0}n$ ) $\wedge$ ncrC0n) $\wedge$ ( $\sum^{1 \leq n \leq N} K_n = K$ ) / $1 \leq n \leq N$ ] $\wedge$ (E-CRTS = (E-complete $\wedge$ correct $\wedge$ definite))]	then go on;
2)	if [O-inC0n, $\forall 1 \leq n \leq N$ are ex- or implicitly lawfully_disclosed]	then go on;
3)	if [O-crC0n, $\forall 1 \leq n \leq N$ are ex- or implicitly enablingly_disclosed]	then output ' <sup>[XXX]</sup> CI <sup>Y</sup> (claim <sup>Y</sup> ) is correct' & stop.
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<sup>[XXX]</sup> ETCl's Claim Construction, CC:	<input ::= <sup>[XXX]</sup> CI <sup>Y</sup> (claim <sup>Y</sup> ) is correct>	& begin:
4)	if [ $\exists E\text{-xcrC}^\# \in E\text{-crCSTT}^0$ , i.e.: E-crCSTT <sup>0</sup> 'comprises an E-xcrC#']	then go on;
5)	if [((( $\exists E\text{-crC}^\circ \in E\text{-crCSETClTT}^0$ ) $\wedge$ ( $\exists E\text{-crC}^\circ \in E\text{-crCSTT}^0$ )): E-crC <sup>o</sup> h.u. E-crC <sup>o</sup> ) $\wedge$ ( $\{TT^0\}$ scope(E-crCSETCl) $\subseteq$ scope(E-crCSTT <sup>0</sup> ))], i.e.: E-crCSETClTT <sup>0</sup> is an 'app. using TT0']	then go on;
6)	if [ $\exists E\text{-crC}^*ETClTT^0 \not\subseteq E\text{-crCSTT}^0$ ( $Y$ marks exactly 1 E-crC as part of E-in <sup>Alice</sup> C), i.e.: E-crCSETClTT <sup>0</sup> is 'basi. indi.' of E-crCSTT <sup>0</sup> ]	then go on;
7)	if [ $\exists E\text{-inC}^*ETClTT^0 \neq E\text{-in}^{Alice}C^*ETClTT^0$ , i.e.: PE transf. is minimally §101 invasive]	then output ' <sup>[XXX]</sup> CC <sup>Y</sup> (claim <sup>Y</sup> ) is PE' & stop.

**Legend:** The Supreme Court unmistakably required by its SPL-framework decisions<sup>a)</sup> — and its 2018 SAS decision — that the criterion for an <sup>[XXX]</sup>ETClY passing test1-6 to be PE is only minimally perforating the §101's 'freedom to invent' guarantee. This requirement is met iff this <sup>[XXX]</sup>ETClY's patent(-application)<sup>xxx</sup> passes of its FSTP-Test also test7, as then a patent is granted ●only to one application of TT0 (as CBN(ETCl) specifies only a single precisely specified application<sup>FSTP</sup> {missing in the '904 patent}) and ●only to a single E-crC (by test6&7).

I.e.: Other such TT0-applications are not excluded in other <sup>[XXX]</sup>ETCl's of other <sup>[XXX]</sup>patent(-application)s' other <sup>[XXX]</sup>CBN<sup>Y</sup>(ETCl)s.

Any TT0-application in 1 <sup>[XXX]</sup>ETCl, of which ●2 or more potential E-inCs — i.e. potential test6/7 E-inCs —  $\exists$ /are known, at least 1 of them must be declared in each claim<sup>Y</sup>/CBN<sup>Y</sup>(<sup>[XXX]</sup>ETCl) for its passing test6&7. Thus, all these  $\exists$ /known E-inCs may be used-up in separate claims as inventive (as the Supreme Court analogously explicitly confirmed in its *Myriad* decision, bottom of page 17).

Thus often <sup>n</sup>PE TT0s and their many PE ETCl's (i.e. applications) will enable many patents — by their several inventive concepts.

The complexity of these problems shows that resolving them without thus scientizing them is impossible — the more as another such stage of diversification is for ETCl's notionally very likely, similar to the 'spin-diversification' in the atom model of Quantumphysics<sup>613</sup>.

- d) The prefix '<sup>[XXX]</sup>' stands for COVID-19<sup>604</sup> & SEQUENOM, the postfix '<sup>Y</sup>' for the claim #. For COVID-19 it is not applicable, as independent claims 1 & 38 — of US patent 10,251,904 B2 — and all their depending claims might protect only Arenaviridae infections and Arenaviridae, Lassa, Junin viruses & related ones. These hence cannot patent protect COVID-19 infections or the SARS-COV.2 virus, as none of them is disclosed, especially not as required by the Supreme Court's SPL-framework, as implied by 35 USC §112.

Finally: Notional sloppiness as in pre-framework patenting<sup>495</sup> is in BioChemicals/-Physics, e.g. Virology et al., totally untenable.

As explained next, the FSTP-Test greatly facilitates ●the CAFC's PE decisions — as taking its ETCIs' PE problems from their originally metarational KR and transforming them into their rational/mathematic KR<sup>[FSTP]</sup>, as by the Supreme Court's SPL-framework implied and even explicitly suggested<sup>2.a)</sup> — and ●the USPTO's PEG updates, especially by vastly shortening & simplifying it, as it is for everyday use too voluminous and partly still not yet rational<sup>[508ftn2.a)]/ b)</sup>.

**SEQUENOM's use of the SPL-framework notions 'application' and 'inventive concept'**. The majority in this CAFC board's decision uses the 2 above SPL-framework names properly. I.e., it renders these 2 originally metarational<sup>b)</sup> SPL-framework notions rational, by ignoring their metaphysical and hence very blurring substances. It thus massively deviates from their indeed 'established'<sup>[615]</sup> but for everybody irrational<sup>b)</sup> CAFC notions that evidently ignore their rational substances (in these originally metarational SPL-framework notions). Thus, this board's minority — sticking with these two notions' established irrational meanings — is at odds with the Supreme Court's striving for sustainability of precedents about also ETCIs' patents (just as with other 'established' CAFC notions, too). To the CAFC, the Supreme Court had repeatedly communicated its sustainability requirement (in its several rejections of pre-framework CAFC decisions) — which it itself by its SPL-framework eventually established.

**COVID-19's use of the SPL framework notions 'application' and 'inventive concept'**. It comprises none of them, as stated in<sup>[604]</sup> already. I.e.: None of these claims' wordings discloses a precisely defined 'application' of its <sup>n</sup>PE 'invention' (in FSTPtech terminology: 'TT0'), as by the Supreme Court explicitly required. But, without these key SPL-framework notions, all COVID-19 ETCIs are <sup>n</sup>PE anyway, as their independent claims each comprises an xcrC rendering it <sup>n</sup>PE — as these ETCIs don't identify or only embody the Supreme Court specified SPL-framework (by which the Supreme Court would require both key notions<sup>[FSTP]</sup>). Finally, this patent is seriously contradictory in itself: It claims a 'method', always being a dynamic entity, but none of its claims specifies or only discloses ex- or implicitly a process, always being comprised by a dynamic entity.

### Summary.

By this mail I familiarized the reader by means of 2 very important practical examples, COVID-19 and SEQUENOM, with ●basics about the US SPL-framework that are key for and actually enable scientizing it — what puts it into the leading position, worldwide<sup>c)</sup> — thereby briefly reminding the reader of the ●dramatic increase of the productivity in all kinds of patenting business and these patents' total robustness<sup>d)</sup>, both due to their automatic mathematizability & testability by our 'Invention/Innovation Expert System, IES'. <sup>[FSTP]</sup>

### Excerpt from the FSTP-Project's Reference List (as of 03.05.2020).

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

<p>[182] S. Schindler: "Basics of Innovation Theory &amp; AI Based Exact Patent Technology", Textbook, in prep.  [495] S. Schindler, B. Wittig: "UC's vs. Broad's CRISPR Patents ...", Part III, publ. 30.01.2019)  [508] S. Schindler, B. Wittig: "The <sup>n</sup>AI-Relation of Application-Controlled ETCIs, <sup>n</sup>ETCIs, Part V", pub. 18.02.2020.  [566] USPTO: The 2019 § 101 October PE Guideline, 18.10.2019<sup>1)</sup>, 1. Version: 07.01.2019)  [573] S. Schindler: "An Unnoticed AI Requ. Met by the Supreme Court's PE Philosophy ...", pub. 09.12.2019)  [575] B. Wegner, S. Schindler: "Math. Mod. the Meaning of FSTPtech Specifications of ETCIs", in prep.  [602] B. Wittig, S. Schindler, B. Wegner: "On Mathematically Modelling <sup>BIochem</sup>ETCIs", in prep.  [604] S. Schindler: "The Hard Need to Scientize <sup>COVID-19</sup> Patents, e.g. the Gilead (Remdesivir) Patent", publ. 24.04.2020).</p>	<p>[613] 'Remdesivir', 'spin', 'quantum mechanics', 'atom model', ...: US WIKIPEDIA)  [614] (Talk:)COVID-19 vaccine: US WIKIPEDIA)  [615] CAFC: Decision in <i>Illumina &amp; Sequenom v. Roche &amp; Ariosa Diagnostics</i>", 17.03.2020<sup>1)</sup>  [616] D. Crouch: "Sequenom Back Again: This time Patent Eligible", Patently-O, 17.04.2020  [619] S. Schindler: "The Meaning is of Any ETCIs' Appl., its 'Inventive Con.', and their Scientif.", publ. 12.05.2019)  [620] R. Eastman et al.: "Remdesivir: A Review of Its Discovery &amp; Development ...", ACS, 05.05.2020  *) The complete FSTP Ref. List &amp; v documents on <a href="http://www.FSTP-expert-system.com">www.FSTP-expert-system.com</a></p>
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- 2.a** The CAFC ignores that Alice clearly requires for its ● step one (p.7, first part of paragraph 1) to interpret the term '... claims at issue are directed to one of those xcrCs [= patent-ineligible concepts]', & ●step two (p.7, end of paragraph 1) to interpret 'patent-eligible application' by its quantification 'sufficient to ensure that the patent [i.e. ETCI] ... amounts to significantly more than ... [= TT0]'. These requirements are evidently rational<sup>b)</sup>, if their synonyms in [...] are considered. By contrast, the CAFC renders them irrational<sup>b)</sup> by ignoring these clarifying rational synonyms and requiring their being directed to patent-ineligible subject matter (not xcrCs!!!).
- b.** The 'notional grain size' hierarchy in reasoning, required by SMP<sup>[FSTP]</sup>, is in the FSTP-Project defined as: 'transcendence — irrationality — metarationality — metarationality — rationality — elementarity (literal & mathematical)'. An ETCI's E-in<sup>Alice</sup>C is not an xcrC, as this failed E-in<sup>Alice</sup>C's ETCI transformation to 'significantly more than TT0' <sup>[FSTP]</sup>.
- c.** Thus, evidently no other wealthy country is in a better position to preserve it, as unfolding an incredible productivity — e.g. not my homeland, Germany, Europe, due to the latter's known intricacies, such as its unitary patents' evident debacles.
- d.** — for factually correct specification of CBN(ETCI) —