A Comment on the 2016 IEG Update: Suggesting More Scrutiny IEG's Two-Step Test, Interpreting the Alice Test, Needs Reconsideration

Sigram Schindler, TU Berlin & TELES Patent Rights International GmbH

I. The Scrutiny Gap in Patent-Eligibility Testing

This comment starts with an explicit acknowledgement of the USPTO's IEG document and its 2016 update: It provides the best guidance possible as to the application of Alice's "Two-Step" test¹.a) to an ETCl^{1.b}) – if one refrains from using therein the notion^{1.c}) of "inventive concept(s)". Yet it finds this "inventive concept(s) abstinence" by now problematic, after the CAFC's DDR/Enfish/TLI decisions and their MBA framework orientation, 1.d) especially in light of the USPTO's recent MEMO about them. [292]

The evident reason for this concern is brought to mind below, before setting the scene for eliminating it. Then Sections II/III show •the much higher clarity achievable for the descriptions of an ETCI (e.g. the DDR-/Myriad-/Enfish-/TLI-ETCIs), if it is described solely through its inventive concepts^{1,e)} – even higher than in the 4 CAFC decisions, •that the Alice test may be represented in such a way that applying it to a thus described ETCI renders this application next-to-trivial and its outcome unquestionable. 1.f) This terminates the uncertainties about the Supreme Court's "Two-Step" test in Alice and the IEG's 2S test. 1.9)

This indicates that unquestionably deciding an ETCI's patent-eligibility requires investing more scrutiny - into deriving its inventive concepts for its description from its specification and prosecution record than required by determining its classical claim interpretation, which evidently requires (almost) none. 1.h)

After the preview of this comment, the drawback of applying the 2S test to an ETCI "as is" is shown – as occurs today in testing its patent-eligibility, as the "inventive concept(s) abstinence" implies that the 2S test must be applied to an ETCI on its specification's "original level of notional resolution."1.i)

But when applying the 2S test to such an ETCI, its weakness becomes apparent: While it is easy to grasp how the three CAFC boards in their 3 decisions proceeded in applying the 2S test, uncertainty arises for the entire community, as to whether an own application of the 2S test to a new ETCl is unquestionable. And this uncertainty must remain^{1,j)} – whatever scrutiny on an ETCl's O-level one invests in this own 2Stest application. All the principally useful tips that the IEG provides for clarifying an ETCI's patent-eligibility through its 2S test - all necessarily based on the ETCI's specification of its patent (application) and its prosecution record, i.e. resting solely on the ETCI's O-level description – cannot remove this uncertainty. 1.j)

[&]quot;ETCI/CTCI" abbr. "emerging/classical technology claimed invention". An ETCI is a pair (TT0=invention, its A*={application,add. inventive concept}). A 'term' is an arbitrary 'identifier' alias 'name' alias 'acronym'. A pair <'term', its 'meaning'> is called 'notion', denoted by its term/name. term/name may be unspecific or a structured string, such as a sentence, e.g. a claim's wording. A notion's meaning, assigned to its term/name, is called its 'semantics', if refined for an application's need, its 'pragmatics'. Making/Creating new meanings/semantics/pragmatics is called 'semiotics'. Thus, the MBA framework performs 'SPL semiotics' by refining the classical SPL notions/pragmatics, as SPL needs for protecting ETCls.1.b) Interpreting a term stands for determining the term's meaning by deriving it from its "semantics base" alias "interpretation base", i.e. for assigning to it semantics/pragmatics. If this term's meaning is significant for an ETCI's meaning, this basis is the ETCI's inventor within the framework disclosed by the ETCI's specifica-

tion, as it is understood by the 'person of pertinent ordinary skill and creativity, pposc' - as required by the Supreme Court's KSR and Biosig decisions.

and the MBA-framework notionally arose from the Supreme Court's decisions in KSR/Bilski/Mayo/Myriad/Biosig/Alice. "MBA" abbreviates this string. In What follows, a term/notion "refined ..." indicates that it is MBA-framework-based.

• instead of vastly describing it by only implicitly using earlier patent-eligibility decisions' implicit inventive concepts – as do also the 3 CAFC decisions. In the MBA framework-id) an ETCI is described by the description of its total inventivity, being the conjunction of all its inventive concepts – as this is exactly all that matters of this ETCI tested for satisfying SPL.

• many ETCIs' patents even as "absolutely robust", not elaborated on here[291fin5.e]

⁻ caused by not investing the required scrutiny for achieving this clarity. 2.e)

Thus enforcing construing a "garbage in, garbage out" claim construction for this ETCI. i.e. on the ETCI's original level of abstraction, here called its "O-level". [293]

which will become evident through the following elaborations. Indeed, the most serious and common complaint about the IEG is that it does not enable .j which will become evident through the following elaborations. Indeed, the most serious and common companies about the collowing deriving from these principally useful examples how exactly to argue for showing, by this own 2S test, this new ETCl is unquestionably patent-eligible.

While this comment has so far stated only this "O-level alone" deficiency in testing an ETCI for patenteligibility, the remainder of this introductory Section now introduces two specific refinements of this Olevel, enabling Sections II&III to show how this uncertainty is indeed removed and replaced with unquestionable certainty.^{1.f)} Achieving such refinements requires for any ETCI the notion of its inCs for representing its description through these inC(s) on its O-level, as well as on its A- and E-levels.^{2.a)}

Actually, these are 2 steps of straightforward^{2.b)} notionally incremental refinement of the ETCl's O-level: From the O-level to the A-level, and from the A-level to the E-level of notional resolution, whereby A and E abbreviate "aggregated" and "elementary", resp. I.e.: Any O-inCs of an ETCl are transformed into a logic conjunction of the ETCl's A-inCs, and then each of these A-inCs is transformed into a logic conjunction of the ETCl's E-inCs, whereby O-inCs are informal and A-/E-inCs mathematically formalizable predicates^{2.c)} of their elements, and all O-/A-/E-inCs are disclosed by the ETCl's specification. I.e., for an ETCl, its A-/E-levels of abstraction of its description incrementally refine its O-level description^{2.d)}. So any one of the O-/A-/E-level representations of the knowledge (KRs) about an ETCl describes the same inventivity of this ETCl, implying that an ETCl's 2S test is applicable to any of its O-/A-/E-KRs,^{2.e)} i.e. to the ETCl's O-/A-/E-level representations. Therefore, an ETCl's E-KR is called the ETCl's – not necessarily unique – "canonical description" alias "canonical representation" alias "canonical form".

One of the several enormous advantages coming with these additional A-/E-levels is that they both enable investing incrementally refined scrutiny into the A- and E-KRs of the 2S test (once for all ETCIs) just as in any individual ETCI to be tested for patent-eligibility. As will be shown by Sections II&III, based on the notion of "inventive concept(s)" and the implied notion of "levels of abstraction" alias "levels of notional resolution", these refinements enable completely removing any uncertainty – complained about above – as to one's own application of the 2S test to a new ETCI and its result.^{2.f)}

Thus, although presently an ETCI's description on its O-/A-/E-levels of abstraction is still unknown, the IEG should already start encouraging •investing this additional A-/E-level scrutiny in testing an ETCI for its patent-eligibility, and •getting familiar with what this means at all up front. The thus achievable increase in efficiency and quality of one's patent work (and improvement of one's personal career) provides plenty of incentives. The great facilitation thereby is: This investment is notionally and legally minimal, as well as stereotypically the same, for all ETCIs.

Achieving the broad and fast dissemination of this "advanced patent technology" should be possible on top of the USPTO's EPQI/PE2E program^[293] – or without it. The IES will support this dissemination by presenting all challenging IEG's sample ETCIs in their canonical description as training material.

.a thereby eventually forgetting the ETCl's O-level description by its "limitations" – as practiced by its today's claim interpretation. 1.h)

[.]b We all know the O-/A-/E-levels of abstraction (i.e. of notional resolution) from our daily life, although we are usually not aware of them: Whenever a person perceives anything whatsoever, she usually becomes aware of this perception on this anything whatsoever's O-level and usually communicates about it through its O-inC(s). Here this anything is disclosed by "mark-up units, MUIs" in the ETCI's specification in natural language and graphical presentations. Identifying/Delimiting/"Compiling" such MUIs is no business of FSTP technology, but assumed to be done up front, ideally by its inventor or applicant. Only when required to become precise about this anything whatsoever, has this person no option but to describe this anything's O-inC(s) through

Only when required to become precise about this anything whatsoever, has this person no option but to describe this anything's O-inC(s) through mathematical predicates, i.e. on its A-level.^{1.d.}. Yet when it comes to assessing this anything whatsoever's patent-eligibility – being the issue of the IEG – also the A-inCs conjunctions by E-inCs are needed.^{3.b.} This aspect is taken care of by determining the refined claim interpretation for an ETCI (see FIG1).

[.]c Mayo/Alice clearly require (though implicitly only) preciseness of the description of the ETCI and all its inCs, as any other claim interpretation (such as the BRIPTO) enables contradictions in itself – as mathematically easily proven.^{2.d)}

[.]d This comment on the IEG is not meant to be complete and/or precise as to all the issues it tackles. Instead, it shall stimulate some understanding of them. For the complete and mathematically precise descriptions of these issues see the resp. earlier and coming FSTP publications.^[5,64,142,182]

Even if this mathematically precise description through predicates is on the E-level replaced by so-called "atomic" meanings in natural language representation, these notions' informal descriptions may nevertheless be used to grant mathematical precision on the A-level – as is known from Mathematics.

e Note that •an ETCl's E-IRR, i.e. its E-level description alias canonical description, does not only comprise its E-inCs, but also their combinations into A-inCs (see the FSTP-test1 of FIG1) – and the A-inCs' combinations into O-inCs, as the Supreme Court through Alice requires, and •on the O-level it is not quite evident how the Alice test works in detail, in spite of its clear preemptivity annotations, also already in Mayo with even more emphasis.

f. Section III shows that this uncertainty – caused by the IEG's vast 'inventive concept abstinence' – is no longer tenable as avoidable: This problem may be fixed soon as recommended by the penultimate paragraph of Section II, and explained in detail in Section III.

II. The Canonical Descriptions of the DDR-/Myriad-/Enfish-/TLI-ETCIs – and the CAFC Decisions

This Section shows in detail where in the CAFC's decisions in DDR/Myriad/Enfish the resp. (implicit) refinements of the notional O-/A-levels into E-levels^{2.e)} occasionally were deficient. It thus explains how this vastly stereotypical investing scrutiny in an ETCI goes: Its O-/A-/E-scrutiny in determining the ETCI's canonical description E-KR^{2.e)}, i.e. in determining the E-KR of/about the ETCI – whereby the IEG's examples are often helpful by hinting at where such scrutiny is needed.

The starting point of such determinations of E-KRs is: Before launching an ETCl's 2S test^{3,a)}, executing the 3 steps indicated in Section I is indispensable for determining^{2.b)}

- on the ETCI's O-level the ETCI's single "O-inC",
- for O-inC, one or several "elements X0n", 1≤n≤N, and for any X0n its precise meaning by representing this meaning as a formal predicate, 2.b) called "A-inC0n",
- for any A-inC0n its precise meaning by representing the latter as a conjunction of a set of formal predicates, called "E-inC0nk",1≤kn≤Kn, whereby any E-inC0nk represents an atomic increment of the ETCl's total inventivity – defined as the logical sum of all inC's of this ETCI (eventually being the conjunction of all its A- and E-inCs).

These 2 steps of refinement, which Alice implicitly requires, are to be performed without any available guidance (except the ETCI's specification) in identifying a combination, COM(ETCI) or COM(ETCI#), and may be repeated for iteratively improving this combination when the one currently tested does not pass the subsequent refined claim construction. Subsection II.5 questions the finality of these refinements.

As all following presentations make use of the FSTP test, it is recapitulated next, from [293].

```
values of I,N,K<sup>1</sup>,..., K^N, and user-names for the ETCI and (optional) for \forall \epsilon of the set
     (a) input:
                            COM(ETCI#)
                                                       A-crC::= \{A\text{-crC0n} \mid 1 \le n \le N\} \cup E-crC::= \{E\text{-crC0nk} \mid 1 \le n \le N \land 1 \le k \le K^n\};
     (b) justof¥1≤n≤N:
                            A-crC0n"
                                                       \Lambda^{1 \le k \le Kn} E-crC0nk, 1 \le n \le N, whereby A-crC0n"::= A-crC0n mod(\{ \forall \in E-ncrC0n\});
     (c) justof v COM(ETCI#): COM(ETCI#)
                                                       is (definite over posc) Λ (E-COM(<TT0,Φ>#) describes a useful
                                                                          ↑ E-COM(ETCI#) describes a new&useful invention);
                                                       is passed: iff this COM(ETCI#) is definite ^complete;
     (d) justof:
                             Biosig-test
2) justofcom(ETCI):
                             ETCI Disclosure-test is passed: iff ∀∈COM(ETCI#) are lawfully disclosed: COM(ETCI#)=> COM(ETCI);
    iustof∀¹≤n≤N:
                             ETCI Enabling-test is passed: iff ∀∈A-crC0n its implementability is disclosed "for being E-crC tested";
4)
    justof:
                            Bilski-test
                                                       is passed: iff
                                                                          E-crC\E-crCmod(A*#) \neq \Phi;
                                                                          ^{\text{ULP}}\text{E-crC}:=\forall \epsilon \text{ {E-crC unlimitedly preemptive}} are identifiable;
5)
    justof:
                             Mayo-/Myriad-test
                                                       is passed: iff
                                                       is passed: iff (1)-5) hold) \land \exists \epsilon (E-crC \setminus ULPE-crC) that is unlimitedly preemptive;
6)
    justof:
                             Alice-test
    justof∀1≤n≤N^1≤k≤Kn
                            Independence-test
                                                      is passed: iff \forall \epsilon \{E\text{-crCOnk} \mid 1 \le n \le N \land 1 \le k \le K^n \} are independent of each other;
    justof♥111≤ink≤lNKn-
                                                                          ∀ ANM(i,n,k)::= if (E-crCink = E-crC0nk or equal within their tole-
                             KSR(RS)-test
                                                       is passed: iff
                                                                          rances) then "A" else "N";
                                                       is passed: iff \forall n \in A \in \{ \forall AC \text{ over ANM} \}.
9)
                             Graham(RS)-test
```

FIG1: The FSTP Test - Checking an ETCI for its Meeting all 9 Requirements Stated by the MBA Framework^{3,b)}

in the IEG understood classically, here suggested^{6,b)} to be refined^{1,d)}

Legend1: The horizontal dashed line separates the refined claim interpretation (above it) from the refined claim construction (below it).

This holds also for the classical claim interpretation and classical claim construction. But, due to the classical negligence in interpreting 35 USC SPL also for A) This holds also for the classical claim interpretation and classical claim construction. But, due to the classical negligence in interpretating 30 000 or a labor of ETCls (not only CTCls).^{2-c)} both notions degenerate to a very high degree, shown by leave the by layon and Alice clearly required refinements of an ETCl's claim interpretation, first of all by substituting an ETCl's thus required in (s) by per se meaningless limitations, hence barring the subtle questions are the properties of the degree of contractions of the properties of the degree of contractions of the properties of the degree of contractions of the degree of the degre caused by an ETCIs' properties (requiring a hitherto unknown high degree of scrutiny), although noticed by the Supreme Court and in the refined claim construction checked by FSTP test4-8 – resulting in an ETCI's classical claim interpretation being meaningless and moreover inseparably jammed with classical claim construction, while both notions are fundamentally separate, as logically evidently implied by §§ 112/101/102/103.

As a consequence, the classical claim interpretation/construction is something intellectually hopelessly premature.

B)The Supreme Court's MBA-framework fixes this intellectual deficit of the classical claim interpretation/construction by requiring describing an ETCI by its

In C(s). This enforces into an ETCl's description the O-IA-/E-levels of abstraction alias notional resolution. [272,291]

Limiting Kant's thinking to the problem here at issue, [291fm2.a]] the O-level models the knowledge representation (KR) of an ETCl's description in speculative Metaphysics, the A-level models its KR pseudo-rationally, and the E-level models its KR rationally. [291,296]

I.e.: An ETCl's functionality is the same in all its 3 KRs, yet on its O-IA-/E-level described speculatively/pseudo-rationally/rationally, respectively. [291fm2.a]]

C)The Alice test models an ETCl's KR totally on its O-level. By contrast, the FSTP test models •pseudo-rationally transforming an ETCl's A-KR into its •rational E-KR and •rationally transforming this E-KR back into its then •rational A-KR. Thereby evidently holds: If an ETCl's A-level is as abstract as possible without losing the rationality of the just mentioned KR transformation then – with all (speculatively metaphysical) likelihood – the non-rationality in an ETCl's KR is minimal, as only an ETCl's KR transformation from its specification in the patent (application) is of speculative Metaphysics. I.e., an ETCl's such A-KR filters out – from the ETCl's description by its specification, which today still is of O-level quality[291fm.s.e] – "as much Mathematics as this ETCl embodies", freely after Kant. Often, some of an ETCl's O-inCs and/or A-inCs are the same as its E-inCs – rarely even all. Nevertheless this is often assumed due to insufficient scrutiny[296]. All classical patent knowhow commits this erroneous assumption – except in the just mentioned rare case – that an ETCl's O-KR in its natent/-application)'s specification is already rational, i.e. is intellectually flawed as stated in A)

patent(-application)'s specification is already rational, i.e. is intellectually flawed as stated in A).

II.1 The Canonical Description of the DDR-ETCI – as seen by the CAFC

In DDR, the CAFC board intuitively met all MBA framework requirements. Yet this intuitivism is highly risky, as many other CAFC decisions prove – which is why Section I asked to stay on the firm ground of rationality in MBA framework-based testing of an ETCI for its patent-eligibility, as exemplified next, following[160].

The (presently missing) scrutiny has to clarify what the DDR-ETCl's invention=TT0 and it's A*={application, inventive concept\\(\frac{1.b}{\}\) are – by identifying this ETCl's A-/E-crCs, i.e. its COM(ETCl\(\frac{#}\)) alias E-KR:\(\frac{2.e}{\}\)

- DDR's ETCI is made up of N::=3 ETCI-elements (in FIG 1 named X1/X2/X3, dropping TT0's "0", as ∄TTi∈RS in patenteligibility tests), representing: X1::= product, X2::= Internet serverP, X3::= Internet serverS,1.c)
- their 3 aggregated potentially creative properties completely describing it, disclosed in the DDR specification, are for:
 - modeled by A-crC1::= X1's id, and for
 - modeled by A-crC2::= (X1's id \wedge X2's URL \wedge X2's look&feel \wedge X3's URL) for all X1 comprised of X24a), and for^{4.b)}
 - modeled by A-crC3::= (X1's id ∧ X2's URL ∧ X2's look&feel ∧ X3's URL)∧(hiding X2's URL for all X1∈X3).

The DDR-ETCl is completely described by X1/X2/X3 and A-crC1\A-crC2\A-crC3. Yet this A-KR would not usually expose TT0's inCs and the additional inC coming with A*, i.e. the *Alice* test is not applicable. Such problems must be overcome by disaggregating the A-crCs into conjunctions of E-(n)crCk, yielding:

E-ncrC1 ::= id, E-ncrC2 ::= X2's URL, E-ncrC3::= X2's look&feel, E-ncrC4::= X3's URL, E-crC5::= X3 hides X2's URL whereby the E-crC1-4 in[160] unfortunately are seen as crCs, due to E-crC5 – enabling describing DDR's E-KR as follows:

- A-crC1::= E-ncrC1 ^
- A-crC2::= E-ncrC1\E-ncrC2\E-ncrC3 \nE-crC4 \A
- A-crC3::= E-ncrC1\E-ncrC2\E-ncrC3\E-ncrC4\E-crC5,

For the DDR-ETCl's "(sales) service outsourcing" TT0 holds: COM(<TT0,Φ>) is obvious and hence patent-noneligible^{5.b)} – creatively applied in COM(<TT0,A*>) with A*= {a^{DDR},E-crC5}.^{4.c})

I.e.: The Alice criterion is applicable to the DDR-ETCI in canonical form and transforms DDR's patentnoneligible invention/TT0 by $A^*=\{a^{DDR}, E-crC5\}$ into the patent-eligible DDR-ETCI = (TT0, A^*).

II.2 The Canonical Description of the Myriad-ETCI – not as seen by the CAFC

In the Myriad-ETCI the A-level properties of Myriad's elements are, i.e. Myriad-A-KR reads:[160]

- Myriad's ETCI has N::=3 elements, X1/X2/X3 representing: X1::= SO testee, X2::= SO wild-type, X3::= BRCA1 indicator,
- their aggregated potentially creative properties completely describing this ETCI, disclosed by Myriad's specification, are for:

```
modeled by A-crC1::= \{SO \ ^1BRCA1 \ gene\} \lor \{SO \ ^1BRCA1 \ RNA\} \lor \{SO \ ^1BRCA1 \ cDNA\}, and for
modeled by A-crC2::=
                            {SO <sup>2</sup>BRCA1 gene : H(SO <sup>2</sup>BRCA1 gene) = <sup>2</sup>BRCA1 gene allele} v
```

(SO 2BRCA1 RNA : H(SO 2BRCA1 RNA) = 2BRCA1 RNA allele) V {SO ²BRCA1 cDNA: H(SO ²BRCA1 cDNA) = ²BRCA1 cDNA allele}, and for

modeled by A-crC3::= T if {H(SO ¹BRCA1 gene, ²BRCA1 gene)} V {H(SO ¹BRCA1 RNA, ²BRCA1 RNA)} V X3 {H(SO ¹BRCA1 cDNA, SO ²BRCA1 cDNA)} contains a resp. allele.

This Myriad-ETCI has the same problems in its A-KR as explained in II.1 above for the DDR-ETCI, hence:

E-ncrC1::= SO¹BRCA1 gene, E-ncrC2::= SO¹BRCA1 RNA, E-ncrC3::= SO¹BRCA1 cDNA, E-ncrC4::= SO²BRCA1 gene : H(SO²BRCA1 gene) = ²BRCA1 gene allele, E-ncrC5::= SO²BRCA1 RNA : H(SO²BRCA1 RNA) = ²BRCA1 RNA allele, E-ncrC6::= SO²BRCA1 cDNA : H(SO²BRCA1 cDNA) = ²BRCA1 gene, ²BRCA1 gene), ³BRCA1 gene), ³BR E-ncrC8::= H(SO¹BRCA1 RNA), E-crnC9::= H(SO¹BRCA1 cDNA), E-crC10::= a procedure that decides whether the resp. set contains an allele, all disclosed by *Myriad*'s specification, enabling *Myriad*'s E-KR as follows:

- A-crC1::= {E-ncrC1} ∨ {E-ncrC2} ∨ {E-ncrC3} ∧
- A-crC2::= {E-ncrC4} v {E-ncrC5} v {E-ncrC6} ^ A-crC3::= ({E-ncrC7} v {E-ncrC8} v {E-ncrC9})^ E-crC10.

For the Myriad-ETCl's TT0 holds: COM(<TT0, $\Phi>$) is obvious and hence patent-noneligible^{5.b)} – creatively applied in the COM(<TT0,A*>) with A*= {a^{Myriad},E-crC10}.

I.e.: The Alice criterion is applicable to the Myriad-ETCI in canonical form and transforms Myriad's patentnoneligible invention/TT0 by A*={ a^{Myriad} ,E-crC10} into the patent-eligible Myriad-ETCI = (TT0,A*).

[.]a The DDR-ETCI specification does not express clearly that X2 must not sell X1 over the Internet – then all said here would evidently hold all the more.

.b All terms right of the preceding "::=" must not be oversimplified: Identifying the meanings that their components indicate, e.g. "X2's look&feel" and more crucial "non-transferring X2's URL for all X1∈X3", and recognizing that they are determinative for the ETCI's inventivity, requires investing substantial scrutiny into finding them and verifying their such impacts, and once more on the E-level. Yet investing this scrutiny is worthwhile: The Alice test can namely unfold its amazing simplification only on an ETCI's E-KR, i.e. is itself refined to this end to "Alice test's canonical form" (see Section III).

.c A further E-crC6 is "hiding the producer's identity" (as also hidden). In a^{DDR}::= "clicking a product on X3 shows X2-look&feel", i.e. E-ncrC3 is a crC.

.d a^{Myriad}::= "known mechanical steps of the test" modeled by E-ncrC1-9 does unfortunately not comprise the decision procedure, modeled by E-crC10.

II.3 The Canonical Description of the Enfish-ETCI – as seen by the CAFC

In the Enfish-ETCI the A-level properties of Enfish's elements are, 5.a) i.e. Enfish-A-KR reads:[291]

- The Enfish-ETCI has 2 ETCI-elements, representing: X1::= an information storage, X2::= a self referencing capability,
- their aggregated potentially creative properties completely describing it, disclosed by the Enfish specification, are for:
 - modeled by A-crC1::= being a logical matrix of cells for the information stored,
 - modeled by A-crC2::= a row including an OID identifying it, represents a record of this information stored, which in particular may point to another row, and a column including an OID identifying it.

This Enfish-ETCI has the same problems in its A-KR as explained in II.1 above for the DDR-ETCI, hence:

E-ncrC1 ::= information in a cell is accessed by (row OID, column OID), E-ncrC2 ::= if (a row's type = "field") then any of its cells identifies a column indicating a specific attribute in whatever record, or otherwise it comprises all attributes of this record, and E-crC3 ::= if a new record is stored and it comprises an attribute for which the matrix comprises no column, this new column is generated and if a record stored already contains it, this is noted in the intersection cell of this record and this new column, yielding

- A-crC1::= E-ncrC1 ^
- A-crC2::= E-ncrC1 \land E-ncrC2 \land E-crC3.

For the Enfish-ETCl's TT0 holds: COM(<TT0,Φ>) is obvious and hence patent-noneligible^{5.b)} – creatively applied in COM(<TT0,A*>) with A*= {a^{Enfish},E-crC3}.

I.e.: The Alice criterion is applicable to the Enfish-ETCI in canonical form and transforms Enfish's patent-noneligible invention/TT0 by $A^*=\{a^{Enfish}, E-crC3\}$ into the patent-eligible Enfish-ETCI = (TT0, A^*).

II.4 The Canonical Description of the TLI-ETCI – not as seen by the CAFC

The TLI-ETCI embodies no inC, whatsoever: Its specification discloses solely non-inCs, i.e. non-inventive concepts, as known by the pposc1.c). Thus, there is no inventive Alice concept. Hence the TLI-ETCI does not pass FSTP-test1, implying that it is patent-noneligible, as per the Alice criterion.

II.5 Two Remarks as to the Finality of these Refinements

Firstly: None of the 4 CAFC decisions notices that the Supreme Court's description of its Alice test is based on 3 separate parts - Alice test's invention/TT0 being patent-noneligibile, its TT0 application a^{Alice}, and its inventive concept jointly achieving this famous transformation^{5,c)} – but none of them clearly identifies these 3 parts. Its scrutiny to this end would increase the evidence that they are Alice-based. Secondly: Having the ETCl's O-/A-/E-levels, the guestion is evident as to whether the ETCl's E-KR is further meaningfully refinable through E-level scrutiny – as indeed possible in DDR/Myriad/Enfish^{4.c/4.d/5.d} and then may increase the ETCI's patent-eligibility (and/or patentability). If an O-/A-crC is already an E-ncrC – or its further refinement delivers only E-ncrCs – its refinement is meaningless in the sense of SPL.

a An ETCI in canonical form/representation is its COM(ETCI#) as of FSTP test1 in FIG1. It describes in a specific way – as its E-KR^{2,1} – a patent-(non)-eligible subject matter. By the *MBA* framework, the latter is an invention of the form <invention TT0,application A*> with TT0 patent-(non)-eligible.

The *Alice* test in canonical form/representation assumes that an ETCI to be tested by it is in canonical form. It is the basis of the PEGG test [144SecVI].

b The notion of preemptivity is explicitly mentioned in the *Alice* opinion, but not in its description of an ETCI's *Alice* test, thus recognizing preemptivity is an "E-level notion" – as the CAFC now also found in applying the *Alice* test to the ETCIs of *DDR* and *Enfish*. The IEG's 2S test, not caring about both highest courts' use of ETCIs' E-level notions – completely ignores preemptivity and insofar misses the point with the Supreme Court's *Alice* test.^{6,9}

This is explained in detail below (and could have become day by a leapner of the page of the point in the page of the page of

[&]quot;E-level notion" – as the CAFC now also found in applying the Alice test to the ETCIs of DDR and Enrish. The IEC's ZS test, not caring about both highest courts' use of ETCIs' E-level notions – completely ignores preemptivity and insofar misses the point with the Supreme Court's Alice test. 4. This is explained in detail below. (and could have happened only by also here, in interpreting the Alice test, applying the unfortunate BRIPTO). The Supreme Court through its MBA framework explicitly does not distinguish between ETCIs' patent-eligibility -noneligibility through their coarse O-level notions – often complained about within the patent community, but cognitively impossible (as the often questioned and indeed really vague term "directed to" evidences)²-d" – yet implicitly it does make exactly this distinction through the ETCIs' finer E-level notions. Namely, by requiring checking whether an ETCI is patent-eligible or not by this ETCI's kind of preemptivity according to 35 USC § 101 – and this requirement must not be ignored in any legal business. Any kind of preemptivity of an ETCI is always caused by its comprising an abstract idea or a natural phenomenon inc. The important dichotomy is "unlimited preemptivity" on the one hand and "limited or no preemptivity" on the other hand. For understanding the MBA framework's dichotomy of ETCIs' 'non/limited preemptivity' vs 'unlimited preemptivity' and this dichotomy's relation to an ETCI's patent-(non)eligibility one must grasp

• firstly, the notion of "of "innorreemptivity": "A patentable and patent-eligible ETCI is called nonpreemptive iff its specification implies that its scope – when and after its patent being granted and valid – is disjoint to the scope of another otherwise patentable and patent-eligible ETCI is called unlimited preemptive iff its specification) that its disjoint to the scope of another otherwise patentable and patent-eligible ETCI is called unlimited preemptive iff its specification implies that its scope – when and after its patent otherwise

As the CAFC noticed, the '604 specification also elaborates on further increments of the total inventivity embodied by the Enfish-ETCI.

III. Applying the Alice Test to an ETCI, Both in Canonical Form, is Trivial and Unquestionable

This Section first shows why this headline is true, and then exemplifies it through the 4 cases of Section II.

To begin with, the patent community assumes there is a "missing link" in the MBA framework – rendering it an alleged "patent-eligibility dilemma". The truth is that there would be a "social dilemma" if ●patent-noneligible ETCIs, being of unlimited preemptivity^{6.b)} (patenting which under Mayo is socially intolerable for very strong reasons^{6,c)}), were not transformable into •patent-eligible ETCls, being of no or limited preemptivity (urgently needed by investors and supported by social consensus, as the Supreme Court's Mayo decision recognized). But through its MBA framework the Supreme Court outlined this transformation, marking the line separating patent-eligibility and -noneligibility, shared now by the CAFC.6.d)

Mayo/Alice emphasize the deep socioeconomic problem in granting patents to sweepingly preemptive ETCls. Yet neither requires granting patents only to nonpreemptive ETCls. And Alice even shows the broad way of eliminating this social dilemma (and the alleged patent-eligibility dilemma) by stating that a patent-noneligible invention/TT0 may be transformed – by an application of TT0 and an inventive concept, jointly called A* – into a patent-eligible ETCI, whereby this pair <TT0,A*> is "significantly more" [than α)TTO \wedge β)avoiding for all inventors of such TT0s this social dilemma]. 6.a)

If an ETCI's canonical representation has already been determined (as in Section II), Alice's patent-eligibility criterion α) \wedge β) – applied to this ETCI in E-KR – reads quite simply:^{6b)}

"An ETCI alias subject matter <TT0,A*>, with TT0 = <TT0,Φ> patent-noneligible, is by A* transformed to patent-eligibility iff the ETCI passes the FSTP-test1-5∧COM(A*TT0)\COM(ΦTT0)≠Φ."

By this criterion the notion of "inventive Alice concept, <TT0,A*>inCAlice" is defined to be the set of ∀ "elementary inventive concept(s), $<TT0,A^*>inC^{Alice} ::= {<TT0,A^*>E-inC^{Alice} ::= COM(A^*TT0)\COM(\PhiTT0)}."6.c)$

This "Alice's patent-eligible criterion in canonical form" for an ETCI in canonical form is unquestionable – just as the "Alice test in canonical form" alias "refined Alice test" trivially derived from it is.

The by the Alice test here enabled main advantages are briefly summarized as follows: It^{6.d)}

- reduces the difficult ethical justification of an ETCI's patent-(non)eligibility to its simple rational test.
- •is a Solomonic solution, favoring ETCI inventors/investors to the utmost and avoiding excrescences. 6.e)
- •is through its "forward protection" capability and the grace period a potential "20 year limit extender".
- •by its simplicity greatly facilitates the mass training in and usage of "advanced patent knowhow". [293]

All in all: This Alice criterion is a game changer in patenting an ETCI – substantially increasing the quality of patents by its additional scrutiny compared to classical claim interpretation. 6.f)

Finally, the simplicity of applying the *Alice* test to an ETCl if both are in canonical form: As evident from Section II, the inventive Alice concept in the CAFC's decision in DDR is trivially {E-crC5}, in Myriad is trivially {E-crC10}, in *Enfish* is trivially { E-crC3}, and in *TLI* trivially is Φ.

a The content of [...], defining the meaning of the term "significantly more" is necessary for the Alice decision to achieve by its Alice test the objective that the Supreme Court evidently is up for by this decision, namely to bar ETCls of unlimited preemptivity from being patented, but not ETCls of limited preemptivity. In line with Mayo's earlier use of this notion "significantly more". The latter and this [...]-content thus do not only mean an evident purely quantitative property of the subject matter <TT0,A*> (by its number of inCs compared to that of <TT0,Φ>), but also a qualitative "more" property, as Alice's A* guarantees by the additional inC coming along with it, as it models α) and β).

b as, based on FIG1 and COM(A*TT0)\COM(A*TT0):= COM(<TT0,A*>)\COM(<TT0,Φ>), easily provable by assuming the contrary. 2e, 1244 SecVI.142, 182] c. <TT0,A*> is then guaranteed to be patent-eligible, not TT0=<TT0,Φ>, and TT0's preemptivity/noneligibility remains unchanged. I.e., TT0 is by the Alice test not checked for being "patent-eligible subject matter", as the IEG's 2S test occasionally is misunderstood. 4. — be a shown by Section II and eventually coming down to solving the problem that unlimited preemptive ETCls must not be protected by patent law, but protecting them by it is necessary by socioeconomic reasons. The Supreme Court solved this problem in an utmost ETCl inventors/investors friendly "non-invasively" (for the innovativity of the US) disable unlimited preemptive ETCls to unfold their excrescences to threaten the patent system by their social unacceptability. 4 in non-invasively describing ET-based innovations that in any future such business will become indispensable socioeconomic knowledge.

f — implied by the need that the ETCl as well as the Alice test are to be brought into canonical form, which moreover represents a fundamental scientific insight into precisely describing ET-based innovations that in any future such business will become indispensable socioeconomic knowledge.

The FSTP-Project's Reference List FSTP = Facts Screening/Transforming/Presenting (Version of 0.9.0.6.2016') The FSTP = Facts Screening/Transforming/Presenting (Version of 0.9.0.6.2016') The FSTP-Project's Reference List FSTP = Facts Screening/Transforming/Presenting (Version of 0.9.0.6.2016')

FSTP = Facts Screening/Transforming/Presenting (Version of .9.06.2016') Most of the FSTP-Project papers below are written in preparation of [182] - i.e. are not interhed to be fully self-explaining independently of their predecessors. S. Schindler: "US Highest Courts" Patent Precedents in MayorMyriad/LSUItramercial/LBC: "Invertive Concepts' Accepted - [160] S. Schindler: "The USSC MayorMyriad/Libb Decisions, The PTO's Implementation by its IEG, The CAFC's DDR & Abstract Ideas' New York Patent Precedents in MayorMyriad/Libb Courts Patent Project Presentation without Intracticages, "publ. 410.12015", its short version", and its PP presentation Presentation Presentation Project Presentation Presentation Presentation Project Presentation Project Presentation Presentation Presentation Project Presentation Presentati			
[2]	S. Schindler: "US Highest Courte Patent Precedents in MayorMyraid CISUltramerical IEE," inventive Concepts Accepted — "Abstract ideas Next? Paterting Emerging Tech. Inventions Now without Intricacies". In Wirth Paterting Emerging Tech. Inventions Now without Intricacies". Alt: Advanced. Information Tech. "alias" Afficial Intelligence Technology" denotes cutting edge IT areas, e.g. "Monwidge Representation Description Logic Natural Language (NL) Semantics Semiotics/System Design. MAI: "Advanced: Afficial Intelligence", the resident Indiament of AT. Material Afficial Intelligence", the resident Indiament of AT.	[161]	Myriad Recent Decisions — Clairflications&Challenges**, publ. 14.012015*), its short viersion*), and its PP presentation at USPTO, 2.01.0215*. S. Schindler: "The IES: Phil. & Func. &, Ma. F. – A Proto.", 7, GIPC, Mumbai, 16.01.2015*). CAFC Decision in CET, 23.12.2014*).
[3] [4]	R. Basilar D. Calvanasa D. McGuinese D. Nardi P. Patal-Schneider: "The Description Logic Handbook" CLIP. 2010.	[162] [163]	CAF C Decision in CE1, 23.12.20147. Schindler: The USSC's Meyol Myriad Alice Decisions: Their Overinterpret. vs. Oversimplification of ET Cls – Scientific. of SPL Prec. as to ET Cls in Action: The CAFC's Myriad & CET Decisions': USPTO, 07.01.20157. Schulze, D., Schoenberg, L. Hunger, S. Schindler: "Intro. to the IES UI of the FSTP-Test", 7. GIPC, Mumbai,
[5] [6] [7]	S. Schindler. Math. Model: Substantive, Patent Law (SPL) Top-Down vs. Bottom-Up*, Yokohama, JURISIN 20 S. Schindler, "BSF" pata, appl.: "THE STP EVERET SYSTEM, 2012. S. Schindler, "DSF" pat. appl.: "AN INNOVATION EXPERT SYSTEM, IES, & ITS PTR-DS*, 2013". S. Schindler, J. Solivaze, "Echnical Report #1 on 902 PTR, 2014.	[164] [166]	16.01.20157.
[8]	.a S. Schindler, "Patent Business – Before Shake-up", 2013"). b S. Schindler, "Patent Business – Before Shake-up", 2015").	[167] [168] [171]	S. Schindler: "Today's SPL Precedents and Its Perspectives, Driven by ET Cls", 7. GIPC, Mumbai, 15.01.20157. R. Sachs: "A Survey of Pat Inv. since Allioe", F8W LLP, Law360, New York, 13.01.20157. S. Schindler: "P10'S IEG Forum - Some Aftermath", publ. 10.02.20157. S. Schindler: "Semiotic Impacts of the Supreme Court's MayorBiosig/Alice Decisions on Legally Analyzing ETCIs"7.
[10] [11] [14]	SSBG's AB to CAFC in LBC, 2013". S. Schindler, "inC" pat. appl. "inC ENABLED SEMI-AUTO. TESTS OF PATENTS", 2013". "INDITIONIEF." "2111 Claim Intermetation: Broadest Reason. Intermetation")	[172] [173]	USSC Decision in Teva, 20.01.2015'). USSC Dec. in Pullman-Standard, 27.04.1982').
[15] [16]	S. Schindler: "KR Support for SPL Precedents", Barcelona, eKNOW-2014". J. Daily. S. Kieff: "Anything under the Sun Made by Humans SPL Doctrine as End. Instit. for Comm. Innovation".	[174] [175] [176]	USSC Decision in Markman, 23.04.1996's S. Schindler: *A Patent's Robush. & 'Double Quantifying' its InCs as of Mayo/Alloe's, WIPIP, USPTO&GWU, 06.02.2015'. R. Rader: Questions as to the FSTP-Test, WIPIP, USPTO&GWU, 06.02.2015. D. Karstledt: "The Completeness Requ. in Pat Law", WIPIP, USPTO&GWU, 06.02.2015'. D. Lvak: "The Unresol Ambiguity of Patent Claims," WIPIP, USPTO&GWU, 06.02.2015'.
[17] [18] [19]	CAFC En branc Hearing in LBC, 12.09.2013. USSC: SSBG's AB in WildTann 23.09.0139.	[177] [178] [182]	D. Natshedi. The Completeness Regular Part Law, Whire, Ost Took Wu, 06.02.2015. O. Livak: "The Unresol. Ambiguity of Patent Claims", WIPIP, USPTO&GWU, 06.02.2015. S. Schindler: "Patent/Innovation Technology and Science". Textbook in oren
[20]	USPTO, "Intellectual Property and the US Economy: INDUSTR. IN FOCUS", 2012'. K. O'Malley. Keynote Address, IPO, 2013'. S. Schindler: An Inventor View at the Grace Period! Kiev. 2013'.	[183] [184] [185]	S. Schindler: "The Mayo/Alice SPL Ts/Ns in FSTP-T&PTO Init.", USPTO, 16.03.2015; S. Schindler: "PTOs Efficiency Increase by the FSTP-Test, e.g. EPO and USPTO", LESI, Brussels, 10.04.2015". R. Chen: Commenting oblitic on "tensions" about the BRI PTO/IPO-EF Day. 10.03.2015.
[21] [22] [23] [24] [25] [26]	Stänford/GNUT. CAFC En bane Hearing in LBC, 12.09.2013. USSC: SSBG's AB in CLS, 07.10.2013. USSC: SSBG's AB in NLS, 07.10.2013. USSC: SSBG's AB in Wildrang, 12.09.2013. USSFTO, Intellectual Property and the US Economy: INDUSTR. IN FOCUS*, 2012. USSFTO, Intellectual Property and the US Economy: INDUSTR. IN FOCUS*, 2012. K. O'Malley, Reynorde Address, IPO, 2013. Self-inder, The IES and in CE rabbled SPL Tests*, Munich, 2013. S. Schindler, The IES and in CE rabbled SPL Tests*, Munich, 2013. S. Schindler, The For Junt Theorems of Malth. Innovoluto Science*, Hong Kong, ECM-2013. S. Schindler, A Paschke, S. Ramakrishna, "Form. Leg. Reas. that an Inven. Sels. SPL*, Bologna, JURIX-2013. USSC: SSBG's AB in Biblist, 606.2009.	[186] [187] [188]	A. Hirshfeld: Rep. about the PTO's progress of the IEG work, PTO/IPO-EF Day, 10.03.2015. P. Michel: Moderating the SPL paradigm ref. by MayolAlice, PTO/IPO-EF Day, 10.03.2015. P. Michel: Askin this panel as to diss. of MayolAlice, PTO/IPO-EF Day, 10.03.2015.
[28]	N. Fusha D. Cabuilles "Att to Can F." 1006	[189] [190] [191]	S. Schindler: "Patent/Innovation Technology and Science", Textbook in prep. S. Schindler: The Mayor/Mice SPL TsNs in FSTP-T8PTO Init", USPTO, 16.03.2015. S. Schindler: The Mayor/Mice SPL TsNs in FSTP-T8PTO Init", USPTO, 16.03.2015. S. Schindler: Tho Section Sect
[30] [31] [32] [33] [34] [35] [36]	N. FULIS, R. Schiwiller, A. Liu, W. O.L. E., 1998. K. Äshley, V. Wilser, "From Info. to Arg, Retr. for Legal Cases", Bologna, JURIX-2013". CAFC, H. in Oracle / Google, "As to Copyrightability of the Java Platf", 06.12.2013. S. Schindler, "RR Based Inn. E. Sys, (IES) for USE P. Preceds", Phylate, (IDIM-2014"). S. Schindler, "Status Report about the FSTP Prototype", Hyderabd, (IPC-2014. S. Schindler, "Status of the FSTP Prototype", Miscow, LES, 2014. S. Schindler, "PR-MEMO". "STL, SCL, and SPL – STL Tests seen as SCL Tests seen as SPL Tests", in prep. S. Schindler, "PR-MEMO". "STL, SCL, and SPL – STL Tests seen as SCL Tests seen as SPL Tests", in prep. S. Schindler, "Prom and Rans of Incentive Concents and Refunder Claim Construction in the Surveyne Court's New Patent	[192] [193] [194]	M. Schecter, D. Crouch, P. Michel: Panel Disc., Patent Quality Summit, USPTO, 25.03,2015. Finnegan: 3 fund. current uncert. on SPL prec., Patent Quality Summit, USPTO, 25.03,2015. S. Schindler, B. Wegner, J. Schulze, D. Schoenberg: "post-Mayo/Glosig/Africe – The Precise Meanings of Their New SPL
[34] [35]	S. Schindler, Status report about her STP Prototype, rytydrabad, uhr-C-2014. S. Schindler, Status of the FSTP Prototype, "Moscow, LESI, 2014. S. Schindler, IPR-MEMO: "STL, SCL, and SPL – STL Tests seen as SCL Tests seen as SPL Tests", in prep.	[195] [196]	
	S. Schindler, Provincing of St. 20cc, all of Tr. 9-11 feels selected as St. 1 feets a St. 1 feets a fing page. S. Schindler, Boon and Bane of Innentive Concepts and Refined Claim Construction in the Supreme Courts New Patent Precedents' Berkeley, PSC, 00.02.014 feets and Refined Claim Construction in the Supreme Courts New Patent Percedents', Berkeley, PSC, 00.02.014 feets of the BRI Standard', APLA, 2009? CAPC, Transcript of the Hearing in ELES vs. CISCOUSPT 0, 08.01.2014 feets of the CAPC, Transcript of the en banc Hearing in CLS vs. ALCC, 08.02.2015 feets of the CAPC, Transcript of the en banc Hearing in CLS vs. ALCC, 08.02.2015 feets of the CAPC, Transcript of the en banc Hearing in CLS vs. ALCC, 08.02.2015 feets of the CAPC, 19.02.014 feets of the CAPC,	[197] [198] [199]	R Stotr: Ped. Cir. Cassis for Watch on Som. Pet. — Preinted bills: Patenthy-0, Uo.4.2-015. See the panel at the PBCCGlocal 19(5), San Francisco. 14-160.62.0157. S Schnidler: MayorAlico — The USSCS Requirement Statement as to Semiotics in SPL 8, ETCIs, USPTO, 06.05.2015/1. S Schnidler: MayorAlico — The USSCS Requirement Statement as to Semiotics in SPL 8, ETCIs, USPTO, 06.05.2015/1. S Schnidler: Pate 3 Ass. Robust, S the FSTP-Test, LESI 2015, Brussels 18.04.2015. BKDA 2015 Rome 27.05.2015. B. Wegner: The FSTP Test — Is Malker Assess, of an ET Ors Practical and SPL Quality', LESI 2015, Brussels, 18.04.2015. and DBCM, 2015. Rome 27.05.2015. D. Schoenberg: The FSTP Test, AS WS, for Ass. an ET C1's Pract, and SPL Quality', LESI 2015 Brussels 18.04.2015 and DBCM, 2015 Rome 27.05.2015.
[37] [38] [39] [40]	CAPC, Transcript of the en bane Heating in CLS vs. ALICE, 08.02.20157. SSBGS Brief to the CAPC in case 4537. SSBGS Brief to the CAPC in case 9020.	[200]	 18.04.2015^a. and DBKDA 2015, Rome, 27.05.2015. D. Schoenberg: "The FSTP Test: A SW Sys. for Ass. an ET CI's Pract. and SPL Quality", LESI 2015 Brussels 18.04.2015 and DBKDA 2015 Rome 27.05.2015^a.
[41] [42] [43]	SSBG's Amicus Brief to the CAFC in case CLS, 06.12.2012'). S. Schindler. "LAC" pat. appl.: "Semi-Auto. Gen./Custom. of (All) Confirmative Legal Arg. Chains (LACs) in a Cl's SPL	[201] [202] [203] [204] [205] [207] [208] [209] [210] [211] [212] [213] [214] [215]	S. Schindler; "The Notion of "InC", Fully Scientized SPL, and "Controlled Preemptive" ETCIs", published by 11.06.20151. I. Kant, http://plato.stanford.edu/entries/kant/.
[44] [45] [46]	Test: Enabled by Its Inventive Concepts, 20147. Reader, S. Continuer, Panel disc., Palents on Life Sciences', Berlin, LESI, 2012. USSC: SSBG's AB as to Clis, 28.01, 20147. USSC: SSBG's AB as to Clis, 28.01, 20147.	[204] [205] [206]	J. Leistin: "The Three Faces of Prometheus: A Post-Alice Jurisprudence of Abstraction", N.C.J.L.&TECH, July 2015;. CAFC Decision in Biosig, 27.04.2015;. USSC Petition for Cert in ULTRAMERCIAL vs. WILDTANGENT, May 2015.
[47]	 Schindler. "Autom. Deirv. of Leg. Arg. Chains (LACs) from Arguable Subtests (ASTs) of a Claimed Invention's Test for Satisfying, SPL*, I J Warsaw, 24,05,2014". Schindler. "Auto., Generation of All ASTs for an Invention's SPL Test".". 	[207] [208] [209]	KJ. Melullis, report about a thus caused problem with a granted patent at the X. Senate of the German BGH. S. Schindler: 'Reach of SPL Prot. for ETCls of Tied Preemptivity', published by 25.06.2015'. CAFC Decision in Ariosa, 12.06.2015'
[50] [51]	NAUTILUS v. BIOSIG, PFC, 2013 ¹). BIOSIG, Respondent, 2013 ¹	[210] [211] [212]	S. Braswell: "All Rise for Chief Justice Robot", <u>Sean Braswell</u> , 07.06.2015' S. Schindler: The Cors. of Ideas Mo. USSC's MBA-Semiotics and its Hi-Level", in prep. R. Merges: "Uncertainty, and the Standard of Patentability", 1992.
[55] [56] [57] [58] [59] [60]	B. Russet "Principia Mathematica", see wikipedia. CAPC Decision Phillips v. AWH Corp., 12.07.2005 M. Adelman, R. Rader, J. Thomas: "Cases and Materials on Patent Law", West AP, 2009.		CAFC Bestion in Tevis, 18.06.2015' K. O'Malley, B. Lynn, A. Weiss, M. Cooper, "Pat. Lit. Case Man.: Reforming the Pat. Lit. Proc", FCBA, 25.06.2015. R. Chen, A. Bencivengo, N. Kelley, J. Reisman: "Claim Construct", FCBA, 26.06.2015.
[59] [60]	in Auditation, Product, J. Introdus. Cases also invalentes of relatin Law, Yest, NY, 2009. SSBGS Amicos Brief to the Supreme Court as to its (Definiteness Custs, 30.3, 2014; S. Schrider, "UT pat appl." An IES Que of S-Auto. Gent Involving All LACs in the SFL-T Ean. by InCs', 2014; S. Schrider, Nu. De c. of All Ang. Chains Leg Del. PaterinopPatented inventions', ISPMM, Montreal, 6.10.2014, v. a) CAFC decision on reexamination of U.S. Pat No. 7, 145-95, 450, 044-20147. b) CAFC decision on reexamination of U.S. Pat No. 7, 145-95, 450, 044-20147.	[217] [218] [219]	S. Schindler: 'The US NPS: The MBA Framework a Rough Diamond – but Rough for Ever? Teva will Cut this Diamond and thus Create a Mega-Trend in PL, Internat.', publ. 21.07.2015's. B. Russet: Principles of Mathematics', see Wilspedia.
[62] [63] [64] [65]		[220] [221]	Not available yet CAFC Decision in LBC, 23.06.20157. CAFC Decision in Cuozzo, 08.07.20157.
[67] [68] [69] [70]	SSBG'S Petition to the CAFC for Rehearing En Banc in the '902 case, 18.04.2014'). CAFC: THERASENSE decision, 25.05.2011 B. Flazoc: Amicus Brief to the CAFC in VERSATA v. SAP&USPTO, 24.03.14').	[222] [223] [224] [225]	CAFC Decision in Versata, 09.07.20157. CAFC Decision in IV enturies, 66.07.20157. J. Duffy, J. Dabrey; PfC, 130.8.20097.
[70] [71] [72]	USSC, transcript of the oral argument in Alice Corp. v. CLS Bank, 31.03.20141. R. Rader, Keynote Speech: "Pat Law and Lik. ab", ED Tex Sench and Bar Conf., 01.11.20131. S. Schindler, Keynote Speech: "eKnowledge of SPL – Trail Blazer into the Innovation Age", Barcelona, eKNOW-20141.	[226]	Duffy, J. Dabrey, Pfc, 1308.20091 S. Schindler: "A PS to an Appraisal to the USSC's Teva Decision: CAFC Teaming-up with PTO for Barring Teva — and this entire: 15 prilf: Framework?", pub 27.07.20151. R. Stol, B. LaMarca, S. Ono, H. Goddard, N. Hoelder: "Challenging Software-Business Method Pat. Eli. in Civil Actions and Post Grant Review. CASPI. Seattle, 240.7.2015. A Serafini, D. Kettelberger, J. Haley, J. Krauss: "Biotech and Pharma Patents Eigi", CASRIP, Seattle, 24.07.2015.
	 a) S. Schindler: The USSC's SPL Intt. 'Sot. its SPL Interpreta. Removes 3 Everg. SPL Obscurites; PR, 08.04.20147. b) S. Schindler: The Supreme Court's SPL Intitative: Sot. its SPL Int. Rem. 3 Everg. SPL Obsc. and En. Auto. in a Cits SPL Tests and Arg. Chains", Honolulu, IAM2014S, 18.07.147. 	[227] [228] [229]	and Post Grant Review, CASKIP, Seattle, 24.07.2015. A. Serafini, D. Kettleberger, J. Haley, J. Krauss: Biotech and Pharma Patents Eligi.:*, CASRIP, Seattle, 24.07.2015. D. Kettelberger, see [227]
[73]	SSBG's Petition to the CAFC for Rehearing En Banc in the '902 case, 18.04.2014'). CAFC. THERASNES decision, 25.05.2011 B. Flacor. Amicus Brief to the CAFC in VERSATA v. SAP&USPTO, 24.03.14*1, USSC, Transcript of the oral argument in Alice Corp. v. CLS Bank, 31.03.2014; R. Rader, Keynote Speech: "Fat Law and Lis. Ab.," ED Tex Bench and Bar Conf., o1.11.2013'). S. Schindler: "The USSC'S SSPL Init." Sci. Its SSPL Interpreta. Removes 3 Everg. SSPL Obscurities," Rr. 08.04.2014'). B) S. Schindler: "The Suprene Court's SPL Initiative", Sci. InsSPL Interpreta. Removes 3 Everg. SSPL Colscurities," Rr. 08.04.2014'). B) S. Schindler: "The Suprene Court's SPL Initiative", Sci. InsSPL Internal Seveng. SPL Obscurities," Rr. 08.04.2014'). B) S. Schindler: The Suprene Court's SPL Initiative "Sci. InsSPL Internal Seveng. SPL Obscurities," Rr. 08.04.2014'). B) S. Schindler: The Suprene Court's SPL Initiative "All MACHINS, 18.07.14'. B) S. Schindler: The Suprene Court's SPL Initiative "All MACHINS, 18.07.14'. B) S. Schindler: The Suprene Court SPL Initiative "All MACHINS, 18.07.14'. B) S. Schindler: The Suprene Court SPL Initiative "All MACHINS, 18.07.14'. B) S. Schindler: The Suprene Court SPL Initiative "All MACHINS, 18.07.14'. B) S. Schindler: The Suprene Court SPL Initiative "All MACHINS, 18.07.14'. B) S. Schindler: The Suprene Court SPL Initiative "All MACHINS, 18.07.14'. B) MENORATION The "The Suprene Court SPL Initiative "All MACHINS, 18.07.14'. B) MENORATION The "The Splender SPL Initiative "All MACHINS, 18.07.14'. B) MENORATION The "The Splender SPL Initiative "All MACHINS, 18.07.14'. B) MENORATION The "The Splender SPL Initiative "All MACHINS, 18.07.14'. B) MENORATION The "The Splender SPL Initiative "All MACHINS, 18.07.14'. B) MENORATION The "The Splender SPL Initiative "All MACHINS, 18.07.14'. B) MENORATION The "The Splender SPL Initiative "All MACHINS, 18.07.14'. B) MENORATION The "The Splender SPL Initiative "All MACHINS, 18.07.14'. B) MENORATION The "The MACHINS THE MACHINS THE MACHINS THE MACHINS THE MACHINS THE	[230]	Justice Dreyer. Annimetes weightign, (John. I. Kant. https://en.wikipedia.com/wiki/Immanuel_Kant. & I. Kant. "Critique of Pure Reason", https://en.wikipedia.com/wiki/I_Kant. I. Kant. "Critique of Pure Reason", https://en.wikipedia.com/wiki/I_Kant. II. Mediarbevised. Exampletions of Metros Science " Metros de India.com
[74] [75] [78] [79]	B. Wegher. The was denial [65], 770.5014 R. Rader, Keynote Speech at GTIF, Geneva, 2014 and LESI, Moscow, 2014	[231] [232]	A Saralini, D. Kettelberger, J. Haley, J. Krauss; "Botech and Pharma Patents Eigl."; CASRIP, Seattle, 24.07.2015. D. Kettelberger, see [227] Justice Breyer: "Archimedes Metaphor", [69]". I. Kant: This Picker wikpedia. com/wiki/Immanuel, Kant. 8. I. Kant: "Chilique of Pura Reason", Hittp://len.wikpedia.com/wiki/, Kant. I. Kant: "Chilique of Pura Reason", Hittp://len.wikpedia.com/wiki/, I. Kant: "Corundwork of the Metaphysics of Natura Science", "Wikipedia. I. Kant: "Corundwork of the Metaphysics of Natura Science", "Wikipedia. I. Kant: "Corundwork of the Metaphysics of Natura Science", "Wikipedia. I. Kant: "What Real Progress has Metaphysics", Metaphysics of Natura Wikipedia.org/wiki/ I. Kant: "What Real Progress has Metaphysics", hittps://len.wikipedia.org/wiki/ I. Kant: "What Real Progress has Metaphysics", hittps://len.wikipedia.org/wiki/ I. Kant: "Work 1907 to
[80] [81]	R. Rader, Kepnote Speech at GTIF, Geneva, 2014 and LESI, Moscow, 2014 S. Schindler ⁷ . On the BRI-Schism in the US NPS, "publ. 220.5 2014.7, USSC: SSBG's PfC in the '902 case, Draft, V.133_ of. [121], publ. 14.07.2014.9, S. Schindler. "Otwons in Interested in the Supreme Court's Blossip Decision"	[233] [235]	I. Kant: "Prolegomena to Any Future Metaphysics", <u>Intos://en.w/lopedia.org/wiki/</u> a USPTO: "July 2016 Update on Subj. Matter Eligibility, 30.07 2015) b USPTO: "July 2016 Update: Memorandum - Recent Subj. Matter Eligibility Decisions", 19.05.2016')
[83] [84] [85]	\$\$BG\$ Petition to the CAFC for Rehearing En Banc in the '453 case, 09.06.2014'). CAFC's Order as to denial [83], 14.07.2014'. CAFC: "At Three Decades", DC, 2012.	[236] [237] [238]	Concepts, http://plato.stantord.edu/entries/concepts/. S. Schindler: "The Supreme Court's Substantive Law (SPL) Interpretation – and Kant", publ 13 04 2016".
[86] [91] [92]	S. Schindler Foundation: Transatlantic Coop. for Growth and Security', DC, 2011. B. Wegner, S. Schindler: "A Math. KR Model for Ref. Cl. Cons. II", subm. for publication. SSBG'S Petition for With of Centiorant to the Supreme Court in the "453 case, 06.10.2014".	[237] [238] [239] [240] [241]	R. Hanna: "Kant and the Foundations of Analytic Philosophy", OUP, 2001. S. Koemer: "The Philosophy of Mathematics", DOVER, 2009 USSC: PIC by Cuozzor. S. Schindler: "Direct of an Amicus Brieft in the USSC in Cuozzo supporting", publ. 05.11.2015/1.
[95] [97]	S. Schindler, AracPEP-MEMO: "Artifice, Action, and the PatEli. Prob.", in prep., 2014.	[243] [244] [245] [246]	M. Lee: Publ. Interview at Opening Plenary Session. AIPLA. DC; 21.10.2015. S. Schindler: The IEGS vuly 2015 Update & the Platen-Eligibility Granteld-ing, PEG* Test*, publ. 18.12.20157. M. Lee: USPT Director's Forum, "Enhanced Patent Quality Initiative: Moving Forward", 06.11.20157.
[98] [99] [101]	G. Boolos, J. Burgess, R. Jeffrey: "Computability and Logic", Cambridge UP, 2007. A. Hirshteld, Alexandia, PTO, 22.07.2014. Michal, Keynote, PTO, 22.07.2014.	[246] [248] [249]	ISOIOSI Reference Model of Open Systems Interconnection, see Wikipedia. USSC Decision in Parker vs. Flook, 2.2.06.19781. CAFC Denial of En Barne Pétilon in Ariosa vs. Sequenom, 02.12.20157.
[109]	**************************************	[251]	S. Schindler: "Patent-Eligibility and the "Patent-Eligibility Granted/-ing, PEG" Test, resp. the CAFC Objectively Counters the Supreme Court's MBA Framework, by its DDR vs. Myriad/ Cuozzo Decisions", publ. 05.01.2016".
[110] [111] [113]	B. Stoll, Seattle, CASRIP, 25.07.2014. R. Rader, Seattle, CASRIP, 25.07.2014. S. Schindler: "The CAFC's Rebellion is Over – The USSC, by MayorBiosig/Alice,", published 07.08.2014/).	[253] [254] [255] [256]	USSC Cert Petitions in Halo v. Pulse and Stryker v. Zimmer, 22.06.2015 CAFC Oral Argument in McRo v. Bandai, 11.12.2015 CAFC Oral Argument in Lewnark v. Impression, 02.10.2015
[116] [119]	R. Merges: ¹ind. Inv.: A Limited Defense of Absolute Infringement Liability in Patent Law", Berkeley, IPSC, 08.08.2014". www.zelt.de/2013/33/multiple-sklerose-medikament-tecfidera/seite-2").	[257] [258] [259] [260] [261]	CAFC Decision in Camegie v. Marvell, 04.08.2015 S. Schindler: "APS as to the Molto Decision", publ. 11.01.2016". S. Schindler: "BRIPTO by the USPTO or BRI ^{MEA} by the Supreme Court?, publ. 03.02.2016, ").
[121] [122] [123] [124]	USSC: SSBG's PfC in '902 case, 25.08.2014"). D. Parnas, see Wikipedia. E. Dijkstra, see Wikipedia	[260] [261]	 Schnidler: Dississal Emilations or MBA Framework's Inventive Councils 7, publ. 60, 220 (e). Schnidler: Pleterk-Eighlink; Vigue Feelings or an MBA Fact, publ. 202, 220 (e). Schnidler: Dississal Emilations or MBA Framework's Inventive Concepts*7, publ. 60, 220 (e). Schnidler, Diaz, T. Hoffmann, L. Hunger, C. Negridler, publ. 202, 220 (e). Schnidler, D. Wasz, T. Hoffmann, L. Hunger, C. Negridler, Publ. 202, 220 (e). The User Interlace Design of an Introviolon Expert System (e) (ES) for Testing on Emerging Technology Claimed Invention (= FCI) for Introviolon System Substantive Pattert Law (= SPL); publ. 07, 03, 2014
[124] [125] [126] [127]	S. Schindler: "Computer Organization III", 3. Semester Class in Comp. Sc., TUB, 1974-1984. S. Schindler: "Nonsequential Algorithms", 4. Semester Class in Comp. Sc., TUB, 1978-1984. S. Schindler: "Optimal Satellite Orbit Transfers", PhD Thesis, TUB, 1971.	[262]	Invention (= ETC)) for its Satisfying Substantive Patent Law (= SPL*), publ. 07:03:201* M. McCormick: "Immanuel Kant: Metaphysics", www.iep.utn.edukantmetal. M. Fuller, D. Hirshfeld, M. Schecker, L. Sheridan, C. Brinckerhoff (Moderator), Panel Disc., IPO, DC.15.03.2016.
[127]	USSC Desison in KSR USSC Desison in Blasi USSC Desison in Mayo USSC Desison in Mayo USSC Desison in Mayo	[263] [264] [265]	W. Quine, see Wikipedia.
e	USSC Decision in Blosig USSC Decision in Alice	[267] [268] [269] [270] [271] [272] [273]	USSC PIC by Samsung v. Apple, 21.03.2016 S. Schindler: "MI mat, appl.: The "WATHEMATICAL INVENTIVE INTELLIGENCE, MII" TOOLBOX", 2016, in prep S. Schindler: "ES-WIE" appl.: "THE IES USER INTERFACE DESIGN", 2016, in prep S. Schindler: "ES-WIE" appl.: "THE IES USER INTERFACE DESIGN", 2016, in prep S. Schindler: "PEGG-Test", pat. appl.: "THE FSTPL", 2016', in prep S. Schindler: "PEGG-Test", pat. appl.: "THE FSTPL", 2016', imples "Levels of Abstraction", pub.1205.2016' S. Schindler: "All me Supreme Court's MBA. Framework "Implies" Levels of Abstraction", pub.1205.2016' S. Schindler: "CSIP" pat. appl.: "CONTEXT SENSITIVE ITEMS PROMPTING '2016, in prep S. Schindler: "MIII, the 'Mathematical Inventive Intelligence Natural Language, especially: Consolidating the Preemptivity and Enablement Problems", 2016, to be published on 01 07 2016. M. Flanagan, R. Merges, S. Michel, A. Rai, W. Taut', "After Alice, Are SW Innovations Ever Patentable Subj. Matter?" V. Winters, K. Collins, S. Mehta, van Pelt: "After Williamson, Are Functional Claims for SW Viable?" V. Collins: "The Williamson Revolution in SW Structure", Washington University, Draft 0401/16. CAF C Decision in Williamson ov. Citrx Online, 2015'3. D. Pamas: "Software Fundamentals", ADDISON-WESLEY, 2001. USSC: Transcript of its Hearing in Cuzzzo on 25.40 2016'
[130] [131] [132] [133]	G. Frege: "Function und Begriff", 1891. L. Witigenstein: "Tract. logico-philoso.", 1918. B. Wegner, MEMO: "About relations (V.7-final)", 25.04.2013 ⁿ .	[271] [272] [273]	S. Schindler: "The Supreme Court's MBA Framework" Implies "Levels Of Abstraction", pub.12.05.2016. S. Schindler: "CSIP" pat. appl.: "CONTEXT SENSITIVE ITEMS PROMPTING", 2016, in prep. S. Schindler: "Mill the Mathematical Invertible Intelligence, Natural Januage, especially: Consolidation the Preemptivity
[134]	B. Wegner, MEMO: "About con of prie. from, scope and solution of problems"; 20.08.2013. B. Wegner, MEMO: "A refined relate between domains in BADest and BESbert, 18.09.2014. H. Gooddard, S. Schindler, S. Steinbrener, J. Strauss: FSTP Meeting, Berlin, 29.09.2014. S. Schnidler Tutoria on Commondities Between System Design and SPT, Testing".	[274] [275]	and Enablement Problems", 2016, to be published on 01.07.2016 Finangan, R. Merges, S. Michel, A. Rail, W. Taut, "After Alice, Are SW Innovations Ever Patentable Subj. Matter?" V. Winters, K. Collins, S. Mehta, van Patt "After Williamson, Are Functional Claims for SW Viable?"
[136] [137] [138]	 Schildler: Tübri and in Commortaliluss between system unbesign at lot 2rt. Essing: ". Schildler: "The Rationality of a Calimed Invention's (Crs) post-Mayo SPL Test - It Increases Cl's Legal Quality and Professional Efficiency in Cl's Use", in prep. Schildler: "He USSC Guid to Robust ET Cl Patents", ICLPT, Bangkok, 22.01.2015/. 	[276] [277] [278]	K. Collins: "The Williamson Revolution in SW Structure", Washington University, Draft 04/01/16. CAFC Decision in Williamson v. Ctrix Online, 2015;1. D. Parnas: "Software Fundamentals", ADDISON-WESLEY, 2001.
[139] [140] [141]	USSC. Order as to denial [12], 14.10.20147. S. Schindler: "§ 10f Bashing or § 10f Ladification", published 27.10.20147. BGH, Temorstationsschrank" decision1.	[279] [280] [281]	USSC: Transcript of its Hearing in Cuozzo on 25.04.2016") M. Lee: Opening Statement at the Patent Quality Community Symposium, USPTO; Alexandria, 27.04.2016 USPTO: "EPQ1", http://www.uspto.gov/patent/initiatives/enhanced-patent-quality-initiative-0
[142]	B. Wegner, S. Schindler: "A Mathematical KR Model for Refined Claim Interpretation & Construction II", in prep CAFC. Transcript of the Hearing in Biosic case. 29 10 2014")	276 277 278 280 280 281 282 283 284 286 286 286 289 291 291 291 293 294 296 296	NVI available YE S. Schindler, "Prototype Demonstration of the Innovation Expert System", LESI 2016, Peking, 16.05.2016. B. Wegner, "The FSTP — Its Math. Assessment of an ETC/S Practical and SPL Quality", LESI 2016, Peking, 16.05.2016. D. Saboreitem: "Depositable and fifth JSE Dem
[148]	R. Rader: Confirming that socially inacceptable CIs as extremely preemptive, such as for example [119]2), should be patent-eligible, AIPLA meeting, DC, 24.10.2014. A. Hirshfeld: Announcing the PTO's readiness to consider also hypothetical CIs into its resp. guideline, AIPLA meeting,	[286] [287]	N. Rautenberg: "Einführung in die Mathematische Logik", VIEWEG-TEURER, 2008 ISOIIEC 7498-1:1994; Information technology – Open Systems Interconnection – Basic Reference Model; www.iso.org N. Eurobe K. Gelürzed T. Kirch "Attemetic Controlled Englich for Konstuden Democratische", Linkungstung 40-22-2008
[150]	U.C. 24.10.2014. S. Schindler: "Alice-Tests Enable 'Quantifying' Their Inventive Concepts – A Tut. about this Key to Increasing a Patent's Robustness", USPTO&GWU, 06.02.2015°1, see also [175]°1.	[289] [290] [201]	CAFC, Decision in Tul 17.0520165. CAFC, Decision in Tul 17.0520165. CAFC, Decision in Tulish, 12.05.20160. Sphindler "Fiffish 7! In CAFC in July with the Sunrama Court's MRA Francuscot" publ 25.05.20160.
[151] [152]	 Schindler: "Biosig, Refined by Alice, Vastly Increases the Robustness of Patents – A Tutorial about this Key to Increasing a Patent's Robustness", in prep."1. Schindler: "Auto. Deriv/Reprod. of Legal Argument Chains, Protecting Patens Against SPL Attacks", Singapore, 	[292] [293] [294]	USPTO: MEMORANDUM as to "Recent Subject Matter Eligibility Decisions", 19.05.2016". S. Schindler. "MRF, the Master Review Form in USPTO'S EPQI, SPL, and the IES", publ. 30.05.2016 "). USPTO: "Strategic IT Plan for PZ 2015/2018", USPTO's home agoae
[153]	ISPIM, 09.12.00141. S. Schindler: "Predictal Impacts of the Mayor/Alice/Biosig-Test – A Tutorial about Patent's Robustness", 2015 IP Scholars Roundt, Drake Unit. Law School, 27.03.2015') CAEC Desision integrant 10.00 2014/hold of 2014 (2014).	[295] [296] [297]	USPTO: FEPOI* http://www.uspto.gov/palent/initiatives/enhanced-patent-quality-initiative-0 Not available by elemonstration of the Innovation Expert System*, LESI 2016, Peking, 16.05.2016. S. Schindler. "Prototype Demonstration of the Innovation Expert System*, LESI 2016, Peking, 16.05.2016. D. Schoenberg: "Presentation of the IES Prototype*, LESI 2016, Peking, 16.05.2016. D. Schoenberg: "Presentation of the IES Prototype*, LESI 2016, Peking, 16.05.2016. D. Schoenberg: "Presentation of the IES Prototype*, IESI 2016, Peking, 16.05.2016. D. Schoenberg: "Presentation of the IES Prototype*, IESI 2016, Peking, 16.05.2016. D. Schoenberg: "Presentation of the IES Prototype*, IESI 2016, Peking, 16.05.2016. S. Fuchs, I. K. Starlamand, T. Kluhr." Attempto Controlled English for Knowledge Representation*, University of Bonn, 2008 CAFC, Decision in TiL/, 17.05.2016? D. CAFC, Decision in Fizikh, 12.05.2016. D. S. Schindler: "Enistis & T.IZ." The CAFC in Line with the Supreme Court's MBA Framework", publ 25.05.20167 USPTO: MENDANDUM as to "Recent Subject Matter Eligibility Decisions", 19.05.2016. D. S. Schindler: "MRF, the Master Review Form in USPTO's EPOI, SPL, and the IES", publ. 30.05.2016 ?. USPTO: "MENDANDUM as to "Recent Subject Matter Eligibility Decisions", 19.05.2016. D. Schindler: "MRF, the Master Review Form in USPTO's EPOI, SPL, and the IES", publ. 30.05.2016 ?. USPTO: "More forment of the 2016 IESU Optional Property of Starty (Property Committee)", 19.05.2016, USPTO's home page L Hunger, M. Weather: The IES GUI - a Turoinari, prep for your property of the Property of
[154] [155]	CAFC Decision in Interval, 10.09. 20141. S. Schindler: "A Tutorial into (Operating) Sys. Design and AIT Terms/Notions on Rigorous ETCIs' Analysis by the Patent Com.", in prep. CAFC Decision in DDR, 05.12. 20141.	,	illable at www.fstp-expert-system.com
[157] [158] [159]	CAPC Decision In DUP, (b. I.2. 2014"). USSPTO: 2014 Inf. Guidance on Pat. Subj. M. Eli. & Examples: Abs. Ideas", 16.12.2014°. USSCS Order as to denia [92], 08.12.2014°. CAPC Decision In Myriad, 17.12.2014°.	, 474	
[.00]	· · · · · · · · · · · · · · · · · · ·		