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*Two Fundamental Theorems of
“Mathematical FOL Innovation Science”*

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A FOL *innovation* alias *invention* alias “*claimed invention*” is presentable as a conjunction of “elements, $X.n$ ”, $1 \leq n \leq N$, having “properties, $\underline{X}.k^n$ ”, $0 \leq k^n \leq K^n$, both represented by binary “concepts” in some “Knowledge Representation, KR”, i.e. in some elementary & independent predicates/concepts:

$$\text{ClaimedInvention} ::= \bigwedge_{1 \leq n \leq N} (\underline{X}.n \wedge \bigwedge_{0 \leq k^n \leq K^n} \underline{X}.k^n),$$

whereby any concept is known from “*pertinent skill*” respect. “*prior art*” or is an “*inventive concept*, in-C”.

THEOREM : A FOL ClaimedInvention’s $|\{\text{in-Cs}\}|$ is an invariant over all its isomorphic KRs.

THEOREM : The claim of a FOL ClaimedInvention is “*nonpreemptive*” iff it is “*well-defined*”.

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