III. Jurisprudence on the patentability requirements for selection inventions

Under this title, it will be discussed what the courts in three major jurisdictions have decided about the patentability requirements of selection inventions, with a view to the recent *Olanzapine* and *Escitalopram* decisions.

A. Facts of the Cases

1. Facts in Olanzapine

The patent in suit was Eli Lilly's patent (EP 0,454,436, US 5,229,382) on a single chemical compound olanzapine, which is a widely prescribed anti-psychotic agent used for the treatment of schizophrenia. The most pertinent prior art reference disclosed a general formula covering theoretically many millions of individual compounds; identified around 100 compounds by name and 15 compounds prepared; but did not disclose olanzapine specifically. Another prior art document disclosed Structure-Activity-Relationship observations of a group of compounds and several closely neighboring compounds to olanzapine, but neither enabled nor even disclosed olanzapine.

The questions at issue were the effect of a particular kind of disclosure, namely, a "Markush" formula which could cover many millions of compounds, the consideration of structural similarity of compounds, and whether a person skilled in the art can modify or supplement the prior art reference's teaching to determine the disclosure of prior art. In the UK, the law of novelty in the context of selection patents was particularly debated in relation to its *IG Rule*.[39]

2. Facts in Escitalopram

The challenged patent was EP 0,347,006 (U.S. RE34,712) belonging to Lundbeck on the (S)-enantiomer of citalopram (Escitalopram), a selective serotonin reuptake inhibitor anti-depressant. The most relevant prior art reference was a patent disclosing a general formula of the racemate mixture of (S)- and (R)- enantiomers.

39 *See infra* III.B.3.