II. Background

A. Markush type claim

There are several special claim formats, such as Jepson type claims, product-by-process claims, means-plus-function claims, step-plus-function claims, Markush type claims, and so on. Markush type claims can be used where no generic term exists which describes the desired individual species and includes claim members selected from a group.[28] For example, "a metal selected from the group comprising nickel, palladium, and platinum". The purpose of a Markush type claim is to describe a group of individual elements which have common features or similar properties, or which have an equivalent basis for categorization in the same group.[29]

The downsides of broad Markush type claims are that they can be difficult to search, increase the prosecution time and examination errors, undermine their status as the prior arts, and be unclear in their scope of protection.[30] Advantages of Markush type claims include that they can offer broader protection for the patentee, be easier to file as one multinational patent application rather than several separate patent applications, and provide the licensor with a better basis for cross-licensing agreements with licensees who own improvement (selection) patents used the licensor's invention.[31] Almost all pharmaceutical patents are basically drafted with Markush type claims. Since selection patent claims, by nature, are directed to a specific species or a subgroup thereof which falls within the prior wider genus, it has been considered whether the disclosure in Markush type claims invalidates a later selection patent.

B. Enantiomers and Related Patents

Enantiomers are compounds which have the same molecular formulas but the special structure of one compound is the nonsuperimposable mirror image of the other,

---

28 *See, e.g.*, Alan L. Durham, Patent Law Essentials: A Concise Guide 61 (2nd ed. 2004).
29 *See, e.g.*, Edward H. Valance, *Understanding the Markush Claim in Chemical Patents*, 1 J. Chem. Doc. 87, 87-88 (1961).
30 *See* Lucille J. Brown, *The Markush Challenge*, 31 J. Chem. Inf. Comput. Sci. 2, 3-4 (1991).
31 *Id.* at 2-3.