

Structural Chemistry, Fuzzy Logic and the Law

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While chemistry is considered to be one of the exact sciences, much of the reasoning in the practice of chemistry is not based on absolutes – “always” and “never” – but rather on general rules and exceptions to those rules. This means that in the practice of their discipline, chemists necessarily resort to what is often called “fuzzy logic”. Some of those chemists are recruited to serve as consultants and expert witnesses in patent litigations that necessarily involve technological and scientific issues often including chemistry. As a result of the fuzzy nature of much of chemical logic, accomplished, well established chemists can find themselves on opposite sides of a courtroom, each representing what he or she honestly believes is correct science, even though in terms of the legal question to be addressed, they are diametrically opposed. In this talk I will provide examples of these aspects of the relationship between the fuzzy logic of chemistry and the role of expert witnesses in patent litigation.