

# Moiety

*A short essay by Marshall E. Deutsch*

Louis W. Mead and I, in U.S. Patents 4094647 (June 13, 1978), 4235601 (November 25, 1980) and 4361537 (November 30, 1982) described a test method which came to be called (not by us) “lateral-flow immunochemistry,” and was so well adapted to simplified tests such as home pregnancy tests that our patents were cited by literally hundreds of subsequent U.S. patents.

Sometimes the holder of one of these subsequent patents would sue the holder of another of these patents for infringement, whereupon the latter would claim that he or she was not infringing on the former’s patent because the former’s patent was not really valid; the claims in question had really been anticipated by our prior patents, which had expired. That’s where I came in. The company being sued would call me as a witness to explain how our patent had really anticipated the patent of the company which was bringing suit for infringement.

I was quite sincere in defending the breadth of our invention: in writing it I had been careful to generalize its utility by using such language as “such label may be any chemical substance or moiety having a detectable characteristic which is ...”. “Moiety,” I believed, meant “entity.” Then, at one of these trials, the judge asked me to define “moiety” and I hedged, suggesting that a dictionary be consulted.

I went home and looked up “moiety” in the third edition of The American Heritage Dictionary and was shocked to note that it was defined only as “1. A half. 2. A part, portion or share. 3. Either of two basic units in cultural anthropology that make up a tribe on the basis of a unilateral descent.” This seemed reasonable; obviously the word is a cognate of the French “moitié.” But it seemed to me that chemists habitually used the word “moiety” to mean “entity.” so I searched Google patents for the word “moiety” and found thousands of references to the word in chemical patents, and every one I checked used it the way I had used it and not with the dictionary meaning.

Then I checked other dictionaries, including the revered Oxford English Dictionary. None of them defined “moiety” as entity. They all had definitions concordant with that in the American Heritage Dictionary. And since so many chemists (who, I am sure, outnumber lexicographers) use the word to mean “entity,” I believe that it is lexicographers who are at fault in not listing a moiety of the meanings of moiety. Nevertheless, very large numbers of patents (I know) and scientific publications (I guess) contain a word whose meaning can be deciphered only by familiarity with its usage and not by consulting a dictionary.