

Can Being Disposable Or Biodegradable Make A Device Patentable?

We all recognize that there are benefits to products that are disposable or biodegradable. However, broadly speaking, everything is [disposable](#) or [biodegradable](#), which makes it difficult, in many instances, to patent an invention that relies heavily on these attributes without a specific element of the invention that allows for the result of biodegradability or disposability.

After reading an interesting article by Alexander H. Tullo, *Degrading Plastics: Makers of Oxo-Degradable Additives Say They Are Addressing The Litter Problem, But Others Aren't So Sure*, ([Chemical & Engineering News](#), June 13, 2011), I am wondering if there are more opportunities for patents directed to degradable and disposable inventions. Mr. Tullo's article primarily focuses on the debate between oxo-degradable additive makers and users, makers of other types of biodegradable plastics, and environmental scientists. In essence, the additives make many plastics break down quicker than the plastics would normally, but their effectiveness is questionable and the by-products may not be as safe or useful as they suggest. Thus, given these shortcomings, one of the principle issues is whether manufacturers of products with oxo-degradable additives should be allowed to market their products as "biodegradable."

Scientific Standards

From my perspective, the important part of the article is the discussion around the scientific standard regarding biodegradability. There is semi-consensus in the scientific community that [ASTM D6400](#) is the standard required to market an item as "biodegradable." The test requires that "90% of the starting material has to be converted into CO2 under composting conditions within 180 days."

The Federal Trade Commission is also considering changes to the [Green Guidelines](#), which "may mandate that a material must decompose completely one year after 'customary disposal' to support a biodegradability claim."

Clearly, rather than claiming that your invention is merely biodegradable, to which the USPTO would likely respond that everything biodegrades over time, you could reference one of these specific tests as the standard for biodegradability in an attempt to confine the USPTO to a standard that it must apply in interpreting your claims.

It would be useful to have similar scientific consensus around disposability (maybe there is and I am just not aware of it?). An inventor can always be his own [lexicographer](#) and state that "disposable" has some meaning, for example, "single use." But even a Maserati could be "single use" to a wealthy individual. Ideally, the term "disposable" would have some fixed definition that would serve to differentiate it from non-disposable products. Thoughts?