## Abstract

Intellectual Property and the Digitization of Taste

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In its infancy, digital communication was limited to text and numerals. Over time, advances in digital photography, video, and audio allowed for the incorporation of photos and sounds. The internet as we know it today reaches two of the human senses—sight and hearing—to a fairly advanced extent.

Efforts are currently underway to extend digital communication to the other three senses. Researchers at institutions such as the Mixed Reality Lab are attempting to digitize smell, taste, and touch. Although the current state of technology is far from perfect (especially for touch and taste), there is little doubt that it will be improved to the point where a digital smell, touch, or taste is a reasonable substitute for actual physical contact or proximity. Once the technology is in place, digitization of all five senses is likely to have a profound effect on the nature of the internet. For example, consumers will be able more accurately to gauge the quality of items they are considering purchasing. The day of the "online wine tasting" is perhaps not that far away.

This paper tackles one part of this broader issue: the intellectual property issues likely to arise in connection with the digitization of the sense of taste. The author selected taste for two specific reasons. First, taste is probably the most difficult of the senses to digitize. Taste does not exist in isolation, but is significantly affected by both smell and the tactile characteristics of what is being tasted. Taste is also highly personal to the observer.

Second, the intellectual property issues that arise in connection with the digitization of taste are in certain ways unique and especially difficult. Consider trademark law. While product characteristics can sometimes serve as a valid mark, a product's taste has historically not been able to serve a trademark function. Unlike appearance, sound, smell, and touch, one must ordinarily consume a product to experience its taste. A product's taste accordingly cannot help consumers in choosing which product to purchase. Once taste is digitized, however, it will be possible to sample a product's taste prior to purchase, thus allowing taste to play a trademark role.

The intellectual property issues arising from digitization of taste are not limited to trademark law. Digitization will also make it relatively inexpensive to experiment and create new types of taste. The creation of new tastes involves potential issues in the realm of copyright, patent, and trade secret law.

The purpose of this paper is not to propose a complete solution to the myriad intellectual issues that arise in connection with the digitization of taste. Rather, the author's goal is to point out the various issues likely to arise, as well as propose a rational approach to dealing with those issues. Identifying and discussing the issues now, before the technology is fully developed, will hopefully prevent distortions in the future.