

Claim Clarity Through Standardization in the Patent Specification

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Towards Patent Standardization, with Janet
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Standardization

- Why standardization?
 - Notice
 - Disclosure
- Sources of standardization
 - Rules/Mandates
 - Voluntary Mechanisms/Soft standardization
 - Extension of industry norms
- Private law connection—Templates, SSOs

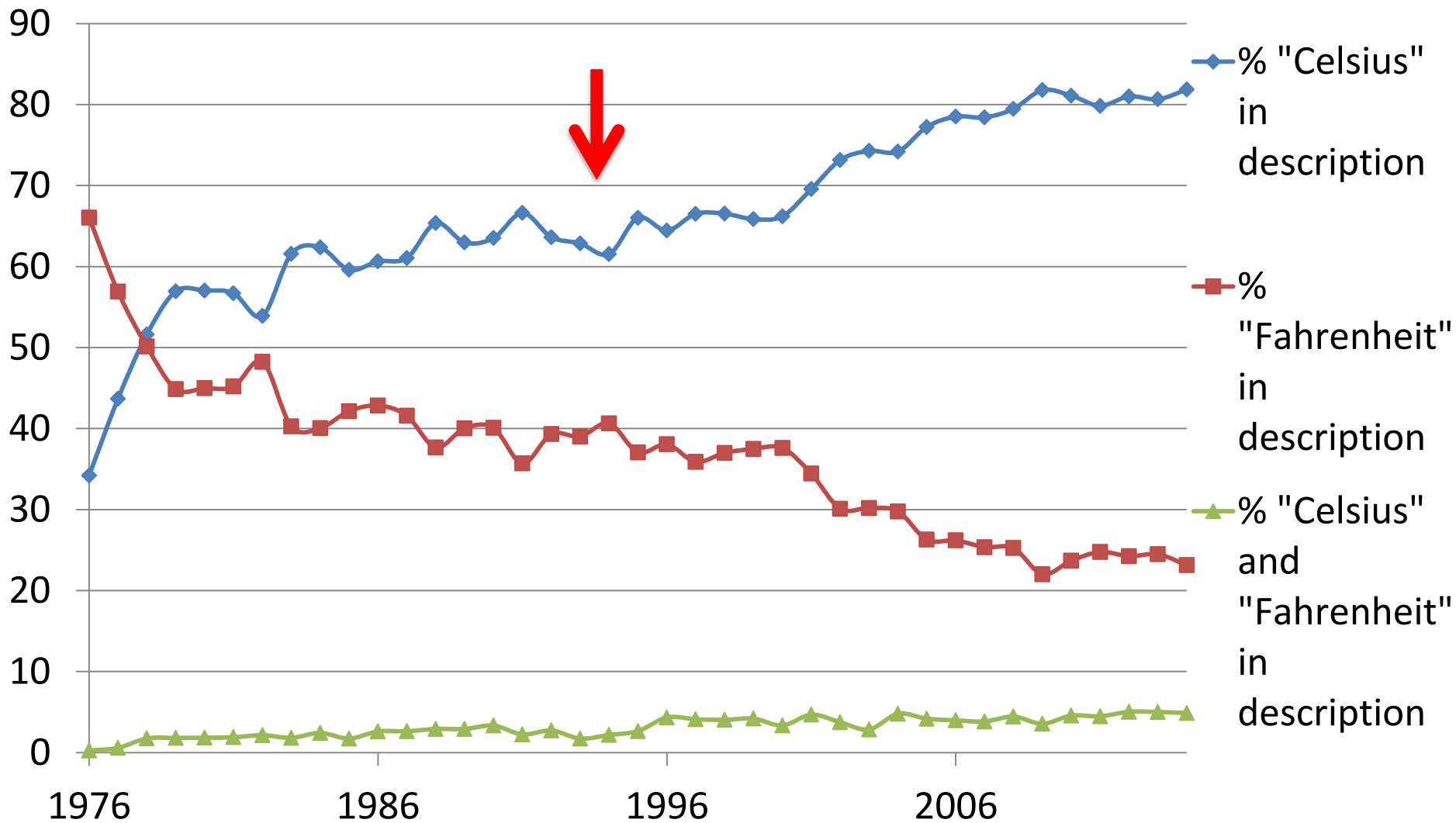
Voluntary Standardization

- Standards (e.g., taxonomies; controlled vocabularies)
 - Created by public and private institutions
 - New vocabularies for new technologies
 - Terminology is well-defined (fewer fuzzy boundaries)
- Patents: do *not* have to use controlled vocabularies
- Non-patents: often *do* have to use controlled vocabularies
- Industry norms → Patent norms

Example: Sequences

- WIPO & USPTO standard for disclosure of nucleotide and amino acid sequences
- Motivation:
 - “improve quality and efficiency of the examination process”
 - “promote conformity with...the scientific community”
 - “improve dissemination of...data in electronic format”

Case Study



Lack of Standardization in the Computer Sciences

- Courts have not developed rules for enablement/
written description for software patents; allowed
unfettered functional claiming
- Fed. Cir. has held that high-level, functional
descriptions sufficient to satisfy the enablement and
written description requirements
- Fed. Cir. shied away from addressing sufficiency of
technical disclosure in a flow chart or diagram
- Fed. Cir. has treated implementation of functional
descriptions in software as a “mere clerical function”
for a skilled programmer
- Williamson v. Citrix (Fed. Cir. 2015) is helpful

Representational Languages

- Describe software functionality in same manner as to a fellow programmer; Tell me how...
- Software designers accustomed to modeling in initial phase of program design
- Programmers put concepts into words and basic steps before implementing them in computer code
- Programmers employ multiple levels of representation before arriving at final source code
- Standardization could encourage use of representational languages in specification of software patents

Representational Languages

- A general-purpose representational language is a language that expresses software/computer functionality in real-world terms
 - Pseudocode; object-oriented languages; modeling languages; and knowledge representation
- Better comprehend new/inventive features in software for which patent protection is sought
- More useful and technically discernable software patent repository

Post-Standardization Problems— Strategic Behaviors

- Powerful interest groups may dominate the standardization in a way that excludes and disadvantages others
- Create two classes of patentees; those who can afford to pay for custom drafting and those who may use templates.
- Searchers may become accustomed to searching through standardized pathways, providing opportunity for patents to stay hidden by using non-standardized language, only to re-appear later
- Very innovative inventions may be difficult to adequately describe within a standardized framework
- If inventors are familiar with standards, they may be constrained to think within them, hobbling creativity

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