

**Before the
United States Patent and Trademark Office
Alexandria, VA 22313**

In the Matter of)	
)	
Request for Submission of Topics for)	Docket No. PT0-P-2015-0074
USPTO Quality Case Studies)	
)	

**SUBMISSION OF CISCO SYSTEMS, INC. AND GOOGLE INC. ON THE
EVOLUTION OF CONTINUATION APPLICATION CLAIMS**

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Proposal for Study

Are the requirements of 35 USC 112 appropriately enforced in the later continuation applications of large patent families in the computer-related arts?

Suggested Methodology

We suggest studying continuations in the computer-related arts to evaluate any trends specific to software and high-tech patents by, for instance, limiting the study to patent families in Technology Centers 2100 (Computer Architecture and Software) and 2600 (Communications), and the business method art units of Technology Center 3600 (*i.e.*, 3620, 3680, and 3690). Within this subset, we suggest studying only patent families having *five or more* continuations, and in particular, analyzing patents that issued from the fifth-filed continuation and beyond. We suggest reporting the following data and performing the following analysis on these patents:

- The percent of families in the computer arts having 5 or more continuations.
- Compare the terms as found in the issued continuation claims with their original patent specifications to determine whether the continuation claim terms are found in the disclosure. While the lack of an explicit match between a continuation claim term and the content of the original disclosure does not necessarily mean that the claim lacks support under section 112(a), it is at least a strong indicator that the claim terms differ from the terminology originally contemplated by the inventor at the time of filing. This difference in terminology increases the likelihood that the continuation claims go beyond what is supported by the specification or are indefinite under section 112(b).
- Determine the frequency with which section 112 was applied in examination, and compare its application in patents for which unsupported claim terms were found to patents that did not have unsupported claim terms.
- Analyze factors that may impact the continuation strategy taken by a patent applicant, and therefore may also impact whether the continuation claim terminology differs from the original disclosure. These factors include transfer of a pending patent family from one entity to another, and litigation of a patent in a family that still has an open continuation. The timing of these factors with respect to subsequent prosecution of a continuation, and issuance of new claims from that

continuation, will be informative when viewed in the context of the claim term comparison.

Explanation

Some patent applicants file numerous continuation applications, keeping a patent family pending for many years in order to capture developments in the market, or to add vague language that can be stretched in litigation. The filing of multiple continuation applications has been linked to the creation of patent “thickets,” and may be used for relatively unimportant patents.¹ One study has found that patents based on continuations represent a disproportionate percentage of litigated patents.² Patent assertion entities often employ this tactic, creating uncertainty that hinders innovation. Section 112’s written description and enablement requirements ought to prevent such claims that reach beyond the scope of the disclosure, but inadequate enforcement has allowed this gamesmanship to thrive, especially in the software and high-tech areas. The practice harms innovation and creates a burden for the Office that increases the backlog.

This proposed quality case study will shed light on the evolution of continuation claims over the life of a patent family and highlight the continued need for increased vigilance in applying section 112 in families having multiple continuations. Based on the study, the Office can take action to alert examiners to continuation applications that fit one or more of the criteria for gamesmanship, such as the total number of continuations in the family, litigation of a counterpart, or a recent transfer. By flagging patent applications in this way, an examiner will be reminded of the scrutiny needed under section 112 to avoid the issuance of a patent with overly broad claims.

¹ See Deepak Hegde, David C. Mowery, and Stuart Graham, *Pioneers, Submariners, or Thicket-builders: Which Firms Use Continuations in Patenting?* 33 (NBER, Working Paper No. 13153, 2007).

² See Mark A. Lemley and Kimberly A. Moore, *Ending Abuse of Patent Continuations*, 84 B.U.L. Rev. 63 (2004) (finding that patents based on continuation applications represent 52% of all litigated patents, but are only filed in 23% of all patent applications).