Search for Tomorrow: The Patent Office's Growing Reliance on Technology to Locate Prior Art

Andrew Chin

This article explores how technology has changed not only how patent examiners and applicants search for prior art, but which documents they find and cite as prior art references. From a comprehensive patent citation database, we identify large sets of citations that are consistent with having been found by computer-aided search methods (single-keyword queries and forward citation tracking) and by paper-based search methods (classification-based search and backward citation tracking). We then develop and apply various measures of prior art search quality to these sets of citations. We conclude that an excessive reliance on search technology may impoverish the breadth and diversity of patent prior art, and ultimately may adversely affect patent quality.