

## Tower of Google II

In January I described a far-reaching initiative by the Internet search giant, Google, to index all of the texts in a number of libraries. The attraction of having literally all the published information in the world available for search is wonderful. It would seem there could be few objections to such an effort. As an author, I certainly would like to have my work indexed, so that anyone interested in optical design or diffractive optics can find and use the information. But the Association of American Publishers and the Authors Guild have filed suits to block the Google Print Library Project, as it currently is being proposed.

The issue raised by the authors and publishers concerns the fair use provision of the Copyright Act. Google claims that it can make digital copies of every copyrighted work in a library, because it intends to use these copies to search their content and then provide up to three "snippets" of the text surrounding the location where the search term is found. This Google says is a fair use of the published material. According to the publishers, this is tantamount to giving Google permission to make copies of every copyrighted work ever published. They feel this unauthorized copying exceeds the limits of the fair use provision.

Compared with a contract with a publisher for the Google Publisher Program for specific books (see the January editorial for a description), the Google Print Library Project encompasses all the books in a cooperating library's collection including copyrighted works. The publishers note the following in their lawsuit: "The only distinction is Google's decision not to seek permission for books included in the Google Library Project because those books happen to be in the collection of a given library. Accordingly, although Publishers support and have given Google permission to include many of their

works in the Google Print Program for Publishers, they have objected to and continue to object to Google's inclusion of their copyrighted works in the Google Library Project."

Google has indicated that the publishers need only inform them of those titles they do not wish to be included in the project. But the publishers responded that this is turning the concept of copyright on its head. They already have ownership and it is Google who needs to request permission, just as is done in the Google Publisher program. Ah me! Somehow, Google and other search services will have to balance their ability to provide access to the information that we need with the protection of the legal rights of authors and publishers. The copyright laws are intended to provide authors recognition and payment for their work and restrict distribution of these works to authorized rights holders so they can pay their publishing costs.

The universal accessibility to the body of current research by anyone with a web browser will have implications for SPIE, for optical engineers and their employers, and for SPIE journals. As publishers and search firms, such as Google, work to provide a nearly complete coverage of the research universe, any indexed research report, if it is important enough, will be found. The download of a digital copy of a paper will be recorded. Thus, just as advertisers now know how effective a Web ad is, the same could be done for technical papers. Based on the number of unique hits that the paper gets, an impact factor could be determined for individual papers, rather than journals. Therefore, the choice of where to publish may not be as important as it is now. Because all journals in digital format would be searched, the location of a printed copy of a journal in a library or the size of the circulation of the journal is of no consequence, reducing the importance of specific journals and their impact factors. Journals will still provide a filtering and validation service.

Considering that many professional societies derive a substantial amount of their support from their publishing operations, progress in the universal search of the technical literature will demand a new set of strategies for their mission and approaches for their operation. While the need to print and publish specific SPIE journals and proceedings may diminish, there will still be a need to talk to others in our field at conferences (real and virtual) and to publish our work. But the Tower of Google and other intellectual exchange mechanisms could cause SPIE to be a different type of professional society for the optical engineer of 2020.

**Donald C. O'Shea**Editor