

→ **Fast Facts**



Patents

The top five patent assignees in 2021 were International Business Machines Corp., Samsung Electronics Co. Ltd., Canon Inc., Taiwan Semiconductor Manufacturing Co. TSMC Ltd., and Huawei Technologies Co. Ltd. IBM was granted 8,682 patents. Huawei was granted 2,770 patents.

IFI Claims Patent Services, "2021 Top 50 US Patent Assignees," January 5, 2022, <https://www.ificlaims.com/rankings-top-50-2021.htm> (retrieved February 4, 2022).



ArXiv.org

ArXiv.org, the preprint "hub for physicists, astronomers, computer scientists, mathematicians, and other researchers," surpassed the 2 million papers milestone on January 3, 2022. "In 2008, 17 years after it went online, arXiv hit 500,000 papers. By late 2014 that total had doubled to one million. Seven years later, arXiv has doubled its library again."

Daniel Garisto, "ArXiv.Org Reaches a Milestone and a Reckoning," *Scientific American*, January 10, 2022, <https://www.scientificamerican.com/article/arxiv-org-reaches-a-milestone-and-a-reckoning/> (retrieved February 4, 2022).



Image provenance: Identifying deep fakes

"The Coalition for Content Provenance and Authenticity (C2PA) addresses the prevalence of misleading information online through the development of technical standards for certifying the source and history (or provenance) of media content. C2PA is a Joint Development Foundation project, formed through an alliance between Adobe, Arm, Intel, Microsoft and Truepic." Version 1.0 of their standard for digital content provenance is now available.

Coalition for Content Provenance and Authenticity, "C2PA Specifications," 2022, <https://c2pa.org/specifications/specifications/1.0/index.html> (retrieved February 4, 2022).



Open index of scholarly papers

"An ambitious free index of more than 200 million scientific documents that catalogues publication sources, author information, and research topics, has been launched. The index, called OpenAlex after the ancient Library of Alexandria in Egypt, also aims to chart connections between these data points to create a comprehensive, interlinked database of the global research system. . . ." "Together, these make a huge web (or more technically, heterogeneous directed graph of hundreds of millions of entities and over a billion connections between them all.)"

Dalmeet Singh Chawla, "Massive Open Index of Scholarly Papers Launches," *Nature*, January 24, 2022, <https://doi.org/10.1038/d41586-022-00138-y> (retrieved February 7, 2022) and "OpenAlex Documentation," <https://docs.openalex.org> (retrieved February 7, 2022).

Gary Pattillo is reference librarian at the University of North Carolina-Chapel Hill, e-mail: pattillo@email.unc.edu