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For over 20 years, Bernard Kress has made significant scientific contributions as a researcher, professor, consultant, advisor, instructor, and author, making major contributions to digital micro-optical systems for consumer electronics, generating IP, and teaching and transferring technological solutions to industry. Many of the world’s largest producers of optics and photonics products have consulted with him on a wide range of applications, including laser-material processing, optical security, optical telecom/datacom, optical data storage, optical computing, optical motion sensors, optical gesture sensing, depth mapping, heads-up displays, head-mounted displays, virtual-reality headsets and smart glasses, pico-projectors, micro-displays, digital imaging processing, and biotechnology sensors.

Kress has more than 30 international patents. He has published four books, a book chapter, 102 refereed publications and proceedings, and numerous technical publications. He has also been involved in European research in micro-optics, including the Eureka Flat Optical Technology and Applications (FOTA) project and the Network for Excellence in Micro-Optics (NEMO) project. He is currently the Optics Lead of the Advanced Prototypes Lab at Google[X] Labs in Mountain View, California.