

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

**AMAZON.COM, INC. AND AMAZON.COM SERVICES LLC,
Petitioners**

vs.

**LIGHTGUIDE, INC.,
Patent Owner**

Case IPR2024-00141

Patent No. 7,515,981

DECLARATION OF FREDERIK KJELDSSEN

I, Frederik Kjeldsen, declare as follows:

I. INTRODUCTION

1. I am an engineer who currently resides in Poughkeepsie, New York. I am currently retired from International Business Machines Corporation (“IBM”) after working there for 33 years. For 27 of those years I worked for the IBM Watson Research Center in Yorktown, New York. My research work focused on various applications of computer vision.
2. During my time at IBM I authored or co-authored nearly 50 academic articles, including the following:
 - Claudio Pinhanez, Rick Kjeldsen, Anthony Levas, Gopal Pingali, Mark Podlaseck, Noi Sukaviriya, *Applications of Steerable Projector-Camera Systems* (in Proc. of the IEEE International Workshop on Projector-Camera Systems at ICCV (October 12, 2003)) (Ex. 1009) (cited as “Pinhanez”)
3. I have confirmed that Exhibit 1009 is a true and correct copy of the article that my team and I published. As discussed below, I also have personal knowledge that this article was available to the community of interested researchers. Pinhanez, and most other publications produced as part of the Everywhere Display project, have been continuously available on the internet from the time of their publication to this day at various web sites of

ED-projector group members, the website for ICCV 2003 and sites such as CiteSeer, ResearchGate and Semantic Scholar.

4. Pinhanez (Ex. 1009) is a paper I co-authored in connection with the Everywhere Display Projector team. It was submitted to and presented at the IEEE International Workshop on Projector-Camera Systems (“PROCAMS’03”) at the International Conference on Computer Vision (“ICCV’03”) in Nice, France. The annual ICCV conference was, and is, a leading public conference for publications related to computer vision, and was widely publicized through emails, on professional organization websites, via mail flyers, advertisements, and word-of-mouth to academics and industry researchers from around the world. As of 2003, ICCV was typically attended by 500 people or more. The conference was advertised to the public by the IEEE and attracted a mixture of university professors, graduate students, industrial research lab employees, and other independent researchers. Attendees at the conference received a copy of the proceedings that included my paper, either at registration or in the mail, within a few weeks of the conference. Pinhanez was submitted to and published as part of the ICCV conference and thus was available to attendees of the conference in 2003. A true and correct copy of Pinhanez exists at what appears to me to be a copy of the CD-ROM of the proceedings for ICCV’03

at

[http://lear.inrialpes.fr/people/triggs/events/iccv03/cdrom/procams03/index.ht](http://lear.inrialpes.fr/people/triggs/events/iccv03/cdrom/procams03/index.html)

[ml](http://lear.inrialpes.fr/people/triggs/events/iccv03/cdrom/procams03/index.html). Additionally, at least as of 2008, the paper was also available for

download from Claudio Pinhanez's work website as shown by

[https://web.archive.org/web/20080423153608/https://research.ibm.com/peop](https://web.archive.org/web/20080423153608/https://research.ibm.com/people/p/pinhanez/publications/procams03.pdf)

[le/p/pinhanez/publications/procams03.pdf](https://web.archive.org/web/20080423153608/https://research.ibm.com/people/p/pinhanez/publications/procams03.pdf).

5. I declare under penalty of perjury that the foregoing is true and correct.

Date: November 4, 2023

By: 
Frederik Kjeldsen