PRESS RELEASE

Fraunhofer Cingo® Brings Surround Sound to Hulu's Virtual Reality Experience

ERLANGEN, Germany (March 24, 2016) – Fraunhofer IIS and Hulu enter an agreement for the use of Fraunhofer Cingo, the leading immersive audio headphone rendering solution for virtual reality and mobile devices. Users of Hulu's VR app will benefit from movies and TV shows streamed using the HE-AAC surround sound audio codec and rendered for headphones through Fraunhofer Cingo.

Immersive audio is crucial for virtual reality experiences to create a full sense of presence. Fraunhofer IIS, the world-renowned experts in audio and multimedia technologies, developed Cingo to achieve enhanced playback of stereo, surround and 3D sound on mobile devices. On VR platforms, Cingo makes use of head-tracking to dramatically improve the entertainment experience on headphones.

HE-AAC is the native surround sound audio codec for Android, the underlying operating system of Samsung phones paired with Gear VR. Android's HE-AAC implementation includes full support for loudness and downmix metadata commonly known from the broadcast TV world, as well as other features that allow the sound to be tailored for an optimum user experience in any environment.

"Great audio is essential for virtual reality, more than on any other platform," says Jan Nordmann, Senior Director Business Development, New Media at Fraunhofer USA Digital Media Technologies. "We are thrilled to bring surround sound to Hulu's virtual reality experience through Fraunhofer Cingo. This helps to create the illusion of true presence."

Consumers can experience Hulu with surround sound today by downloading the Hulu VR app from the Oculus Gear VR Store.

Cingo is available from Fraunhofer as a product-ready software implementation for mobile device manufacturers, chip set vendors and providers of multimedia services. Visitors of NAB can experience Cingo at the Fraunhofer booth SU6716.

HE-AAC is today's most efficient high-quality surround and stereo codec, deployed in over 8 billion devices and used in TV, radio and streaming services worldwide.

For more information, visit http://www.fraunhofer-cingo.com/

About Fraunhofer

When it comes to innovative audio technologies for the rapidly evolving media world, Fraunhofer IIS stands alone. For more than 25 years, digital audio technology has been the principal focus of the Audio and Multimedia division of the Fraunhofer Institute for Integrated Circuits IIS. From the creation of mp3 and the co-development of the AAC to the future of audio entertainment for broadcast, Fraunhofer IIS brings innovations in sound to reality.

Today, technologies such as Fraunhofer Cingo for virtual surround sound, Fraunhofer Symphoria for automotive 3D audio, AAC-ELD for telephone calls with CD-like audio quality, and Dialogue Enhancement that allows television viewers to adjust dialogue volume to suit their personal preferences are among the division's most compelling new developments.

Fraunhofer IIS technologies enable more than 8 billion devices worldwide. The audio codec software and application-specific customizations are licensed to more than 1,000 companies. The division's mp3 and AAC audio codecs are now ubiquitous in mobile multimedia systems.

Fraunhofer IIS is based in Erlangen, Germany and is a division of Fraunhofer-Gesellschaft. With more than 23,000 employees worldwide, Fraunhofer-Gesellschaft is comprised of 67 institutes and research units making it Europe's largest application-oriented research organization.

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