Press Release

Fraunhofer Technologies Drive New Business Opportunities for Broadcasters and Service Providers

Leading audio and multimedia expert delivers innovative solutions for current and future demands

Fraunhofer IIS, the world's renowned source for audio and multimedia technologies, is delivering the technology broadcasters and service providers need to stay competitive and drive future business opportunities. Fraunhofer's high-quality and future-proof solutions for Internet radio, online music streaming, and digital broadcast open the door for new revenue streams and enable attractive service enhancements for the end user.

"Empowering our customers to provide the highest quality audio and multimedia experiences to the end user continues to be a driving force behind Fraunhofer's innovative technologies," said Harald Popp, head of the Multimedia Realtime Systems department, Fraunhofer IIS. "As both a research powerhouse and commercial supplier, our team of experts closely follows the growing demands in the industry and brings visions to market."

Fraunhofer has outlined three areas of focus that have a strong business growth opportunity. As end users demand the latest entertainment experiences, Fraunhofer delivers innovative new business opportunities for broadcasters and service providers to meet these needs by enabling differentiated services, new ways to generate revenue and the highest possible quality.

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Internet Radio and Online Music Streaming

Fraunhofer's MPEG Surround codec allows broadcasters and pure play music service providers to deliver cost-effective ways to offer the best possible end user experience and generate new revenue streams. Through Fraunhofer, these organizations can offer truly differentiated premium services with high-quality 5.1 surround sound, which enables broadcast and streaming services at stereo bit-rates over all existing and future distribution channels. As a result, this generates additional revenue opportunities for the broadcaster or services provider, while meeting the increasing demands of the end user for quality audio content.

Digital Radio Broadcast Data Services

Digital radio broadcasters are in need of the latest technologies to retain existing customers and increase their listener base. Fraunhofer's broadcast data service allows broadcasters to gain a competitive advantage, while increasing advertising revenues.

Journaline, the international standard for high quality data services for the transmission of up-to-date text information over digital broadcast systems, enables broadcasters to create new business models. Journaline's text-based system supports, for example, advertisements in multiple languages and integrates interactive URLs, instantly linking a commercial to a webpage. The interactive service also brings added benefits to end users, allowing them to easily and immediately access topics of interest, both program-related and program-independent textual information. This added feature further

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encourages end users to shift from traditional FM radio to digital radio.

Digital TV Broadcast Audio Codec

The multi-channel audio codec HE-AAC is currently becoming the codec of choice of most state-of-the-art digital TV broadcast systems. Broadcasters and regulation authorities all over the world switch to HE-AAC due to its unique feature set. As HE-AAC is much more efficient than legacy TV broadcast codecs, more programs can be transmitted over the same channel, ultimately generating more revenue for broadcasters and service providers. Of course, HE-AAC meets the demands of broadcasters in terms of simulcasting stereo and 5.1 sound, metadata support, transcoding capabilities, and flexibility. That's why most newly introduced TV broadcasting systems are based on HE-AAC.

For more information, visit
www.iis.fraunhofer.de/en/bf/amm/

About Fraunhofer IIS

The Fraunhofer IIS Audio and Multimedia division, based in Erlangen, Germany, has been working in compressed audio technology for more than 20 years and remains a leading innovator of technologies for cutting-edge multimedia systems. Fraunhofer IIS is the main inventor of mp3 and universally credited with the development of AAC (Advanced Audio Coding) as well as technologies for the media world of tomorrow, including MPEG Surround, MPEG Spatial Audio Object Coding and the Fraunhofer Audio Communication Engine.

Through the course of more than two decades, Fraunhofer IIS has licensed its audio codec software and application-specific customizations to at least 1,000 companies. Fraunhofer estimates that it has enabled more than 1 billion commercial products worldwide using its mp3, AAC and other media technologies.

The Fraunhofer IIS organization is part of Fraunhofer-Gesellschaft, based in Munich, Germany. Fraunhofer-Gesellschaft is Europe's largest applied research organization and is partly funded by the German government. With 18,000 employees worldwide, Fraunhofer-Gesellschaft is composed of 60 Institutes conducting research in a broad range of research areas. For more information, contact Matthias Rose, matthias.rose@iis.fraunhofer.de, or visit www.iis.fraunhofer.de/amm.