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ITU APPROVES POLYCOM SIREN14 AS NEW INTERNATIONAL STANDARD – ITU TESTS SHOW SUPER WIDEBAND AUDIO BETTER THAN MPEG4

Royalty-free licensing terms to drive adoption

PLEASANTON, Calif. – April 12, 2005 – Polycom®, Inc. (NASDAQ: PLCM), the world’s leading provider of unified collaborative communications solutions, today announced that the International Telecommunications Union (ITU) has approved Polycom’s Siren14™ technology as a new 14 kHz super-wideband audio coding standard, and the approval now goes to “last call” as ITU-T Recommendation G.722.1 Annex C. The technology, which is being offered with royalty-free licensing terms, provides near-CD quality audio for better clarity and less listener fatigue with applications like video conferencing. Siren14 requires dramatically less computing power and bandwidth than alternative wideband audio technologies like MPEG4 AAC-LD, eACC+ and AMR-WB+.

“Polycom is a strong proponent of industry standards and continues to serve as a pioneer in developing and promoting standards for interactive video communications,” said Hans Schwarz, chief technology officer at Polycom. “Siren14 is a mature super-wideband audio technology that has been proven on Polycom video conferencing systems for more than five years and is ideal for real-time teleconferencing and Internet streaming applications. We are pleased the ITU has recognized its unrivaled performance and are offering royalty-free licensing terms to ensure its widespread use across manufacturers and accessibility to customers”.

In addition to driving the technology behind the new G.722.1 Annex C, Polycom was also instrumental in developing many other of today’s video conferencing standards, including the previous wideband audio standard G.722.1 (Siren 7), the video coding standard H.264 (also known as MPEG4 Part 10), the H.239 standard for video and data sharing (also known as People+Content™) and video extensions to the IETF’s Session Initiation Protocol (SIP). Siren 14 is the second audio coding technology from Polycom that has been approved as a standard, following Siren 7 (G.722.1), which is currently licensed by companies including: Aethra, Marconi, Microsoft, Mitsubishi, Radvision, VCON and others.

The Siren14 Difference

Polycom’s patented Siren14 algorithm offers breakthrough benefits compared to earlier wideband audio technology. Siren14 delivers low-latency 14 kHz super-wideband audio at nearly half the bitrate of the alternative MPEG4 AAC-LD codec, while requiring one-tenth to one-twentieth of the computing power. As a result extra processor cycles are available for improved video quality or Internet applications, and batteries will last longer on mobile devices.

“The 14 kHz audio bandwidth captures 100 percent of the energy in human speech and covers the full range of frequencies audible to most adults,” said Schwarz.

The Polycom Siren14 technology behind G.722.1 Annex C is used today in Polycom’s industry-leading video conferencing systems. As confirmed by independent ITU-sanctioned testing, G.722.1 Annex C delivers 14 kHz audio fidelity at 24, 32, or 48 kbps (kilobits per second). For comparison, the older MPEG4 AAC-LD technology requires typically twice the bitrate to deliver the same fidelity. MPEG4 AAC-LD also requires significantly more processing power than the new G.722.1 Annex C.

The Polycom Siren™14 algorithm offers a number of other advantages over earlier codecs:

- **Low computing power solution ideal for battery powered devices** – Siren14 requires less than 11 WMOPS (Weighted Million Operations Per Second) – an ITU measure of computational complexity, similar to MIPS – for encoder + decoder operation, compared to 100 to 200 WMOPS for competing algorithms. As a result, Polycom Siren14 can be used with lower-cost processors that consume less battery power such as PDAs, cellphones, or even wristwatches, and computing resources can be saved for tasks such as improving video performance.
- **Low latency results in more natural, spontaneous conversations** – Siren14 offers 40 millisecond algorithmic delay, using 20 millisecond frame lengths. This is among the lowest latency of any super-wideband codec, meaning that conversations are more natural and spontaneous.
- **Handles speech, music and natural sounds with ease** – Polycom Siren14 is a transform codec, not a speech-model based codec, so it handles speech, music, and natural sounds with equal ease. Other codecs perform well on speech, but break up when presented with natural sounds or music.
- **Low bandwidth requirements enable better video quality** – Siren14 requires bit rates of 24, 32, and 48 kbps – significantly lower than needed by MPEG4 AAC-LD for the same level of quality, as shown in testing at the ITU. This leaves more bitrate available for improved video quality.
- **Only state-of-the-art audio compression with royalty-free license terms offered** – All other royalty-free audio codecs use techniques from expired patents; their performance in terms of quality and compression is poor compared to modern standards.

Siren14 Meets Most Demanding Real-World Applications

Manhattan School of Music leverages the benefits of Siren14 for remote concert performances and musical training over video conferencing through the Polycom VSX™ 8000 system, which is specifically designed for larger rooms and integrated custom-room environments. The system offers Siren14 audio and Polycom StereoSurround™ for unprecedented sound quality and clarity that uniquely recreates the spatial sound resulting from a participant's location in the classroom at the far end. It offers near-CD sound quality, including full-duplex stereo echo cancellation.

Louis Brown, chief audio engineer at the Manhattan School of Music and an innovator in adapting recording techniques for music performance video conferencing, said: “The Polycom VSX 8000 allows me to create a greater depth of sound and image providing a more realistic virtual environment. I am now able to explore and utilize more creative audio techniques, never before imaginable, with impressive results.”

More information about the new ITU-T G.722.1 Annex C standard using Polycom Siren14 technology, is available at www.polycom.com.

About Polycom

Polycom, Inc. is the worldwide leader in unified collaborative communications (UCC) that maximize the efficiency and productivity of people and organizations by integrating the broadest array of video, voice, data and Web solutions to deliver the ultimate communications experience. Polycom's high quality, standards-based conferencing and collaboration solutions are easy to deploy and manage, as well as intuitive to use. Supported by an open architecture, they integrate seamlessly with leading telephony and presence-based networks. With its market driving technologies, best-in-class products, alliance partnerships, and world-class service, Polycom is the smart choice for organizations seeking proven solutions and a competitive advantage in real-time communications and collaboration. For additional information call 1-800-POLYCOM (765-9266) or +1-408-526-9000, or visit the Polycom website at www.polycom.com.

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