

ABSTRACT OF THE DISCLOSURE

REALIZING HIGH QUALITY LPCM AUDIO DATA AS TWO SEPARATE ELEMENTARY STREAMS

5 [032] A method and apparatus for providing high definition audio formats in a minimum file size while providing compatibility for media players capable of decoding only lower quality audio files. In an embodiment of the invention, a linear pulse code modulation (LPCM) 192/24 data stream is split into two elementary data streams. The primary data stream is in LPCM 96/24 (96KHz sampling rate and 24 bit sample size)

10 format, which can be rendered by all media players capable of decoding advanced entertainment formats. The secondary data stream is comprised of additional bits required for support of the LPCM 192/24 format. Media players capable of only reading LPCM 96/24 format can operate by rendering the primary data stream in its native format. Players capable of reading the LPCM 192/24 format combine the

15 primary and secondary data streams to create a composite LPCM 192/24 data stream for rendering. The combined size of resulting primary and secondary data stream files is less than the file size created by current implementations of LPCM 192/24 supporting a separate mandatory audio stream of LPCM 96/24. Using the method and apparatus of the invention, high definition audio formats can be supported with reduced file sizes,

20 and base-level media players will be able to render the highest quality audio format they are capable of supporting.

Figure 2

