

wherein θ' indicates the second elevation value,

wherein the second azimuth value φ' results from a first mapping of the first azimuth value φ according to the first linear mapping function according to

$$\varphi' = \begin{cases} \frac{\varphi_{right}^{repro} + 180^\circ}{\varphi_{right}^{nominal} + 180^\circ} \cdot (\varphi + 180^\circ) - 180^\circ & \text{for } -180^\circ \leq \varphi < \varphi_{right}^{nominal} \\ \frac{\varphi_{left}^{repro} - \varphi_{right}^{repro}}{\varphi_{left}^{nominal} - \varphi_{right}^{nominal}} \cdot (\varphi - \varphi_{right}^{nominal}) + \varphi_{right}^{repro} & \text{for } \varphi_{right}^{nominal} \leq \varphi < \varphi_{left}^{nominal} \\ \frac{180^\circ - \varphi_{left}^{repro}}{180^\circ - \varphi_{left}^{nominal}} \cdot (\varphi - \varphi_{left}^{nominal}) + \varphi_{left}^{repro} & \text{for } \varphi_{left}^{nominal} \leq \varphi < 180^\circ \end{cases}$$

and

wherein the second elevation value θ' results from a second mapping of the first elevation value θ according to the second linear mapping function according to

$$\theta' = \begin{cases} \frac{\theta_{bottom}^{repro} + 90^\circ}{\theta_{bottom}^{nominal} + 90^\circ} \cdot (\theta + 90^\circ) - 90^\circ & \text{for } -90^\circ \leq \theta < \theta_{bottom}^{nominal} \\ \frac{\theta_{top}^{repro} - \theta_{bottom}^{repro}}{\theta_{top}^{nominal} - \theta_{bottom}^{nominal}} \cdot (\theta - \theta_{bottom}^{nominal}) + \theta_{bottom}^{repro} & \text{for } \theta_{bottom}^{nominal} \leq \theta < \theta_{top}^{nominal} \\ \frac{90^\circ - \theta_{top}^{repro}}{90^\circ - \theta_{top}^{nominal}} \cdot (\theta - \theta_{top}^{nominal}) + \theta_{top}^{repro} & \text{for } \theta_{top}^{nominal} \leq \theta < 90^\circ \end{cases}$$

13. A decoder device comprising:

a USAC (Unified Speech and Audio Coding) decoder for decoding a bitstream to obtain one or more audio input channels, to obtain one or more input audio objects, to obtain compressed object metadata and to obtain one or more SAOC (Spatial Audio Object Coding) transport channels,

an SAOC decoder for decoding the one or more SAOC transport channels to obtain a first group of one or more rendered audio objects,