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**Dynamic sound image creation by un-directional sound beam reproduction toward an interior surface with a DSP controlled line array speaker for Surround Sound Composition**

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Surround Sound Composition in an indoor space is frequently provided with spatial sounds, giving both a sound localization and surround sound effect. Systems have been installed in public spaces such as a museum and retail shops. However, technical improvements are required to provide a small sweet spot and to address architectural designs for speaker installation, because multiple speakers are required for surround sound effect. Recently, we have been applying DSP beam-forming technology with a line-array speaker to create a 3D sound image by scanning a focused sound beam onto an interior surface. The DSP array speaker is capable of providing static and dynamic control in beam steering and sound focusing. Therefore, dynamic spatial sound effect on the interior surface is possible, wherein un-directional sound reproduction is analogous to un-directional lighting. We present three case studies ;1) Virtual 3D Surround Sound in multi-media improvisation, 2) 3D Spatial Sound Synthesis in sound installation and 3) Sound Installation with a Dynamic Sound Beam Scanning.