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OF TELEVISION, SOUND PROGRAMME AND OTHER
MULTIMEDIA SIGNALS

Application for Interactive Digital Television – Part 2

Requirements for augmented reality smart television systems

Recommendation ITU-T J.301

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Requirements for augmented reality smart television systems

Summary

Recommendation ITU-T J.301 specifies requirements that should be considered for augmented reality (AR) smart television system (AR-STV).

AR technology integrates 2D/3D graphics into real-world situations in order to enhance the user experience and enrich information. As smart devices have become more common, AR has been adopted in various applications such as AR-books, AR shopping, AR-SNS, etc. Depending on trends of AR technology, TV broadcasting can be positioned as a more advanced and smart service platform by applying this new technology. Usually, mobile devices such as smartphones and tablets have various sensors to determine the location, direction and speed of the device. However TVs do not have such sensors and cannot provide the same user experience as a smartphone, which can also offer automatic addition of virtual visual components. AR on TV focuses on overlaying visual components onto broadcast content in real time, optionally manipulating components by using a smart device. AR-STV is TV broadcasting using AR technology to blend augmented content (2D/3D graphic objects) with broadcast content in real time on receiving terminals. The augmented content overlaid in the augmentation region is fixed statically or can move along a trajectory similar to what could be provided by an AR-based location application on a smart phone that shows path information on the real location from a smartphone's camera. AR-STV provides that TV viewers can watch the mixed broadcasting contents whenever they want only the service.

History

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