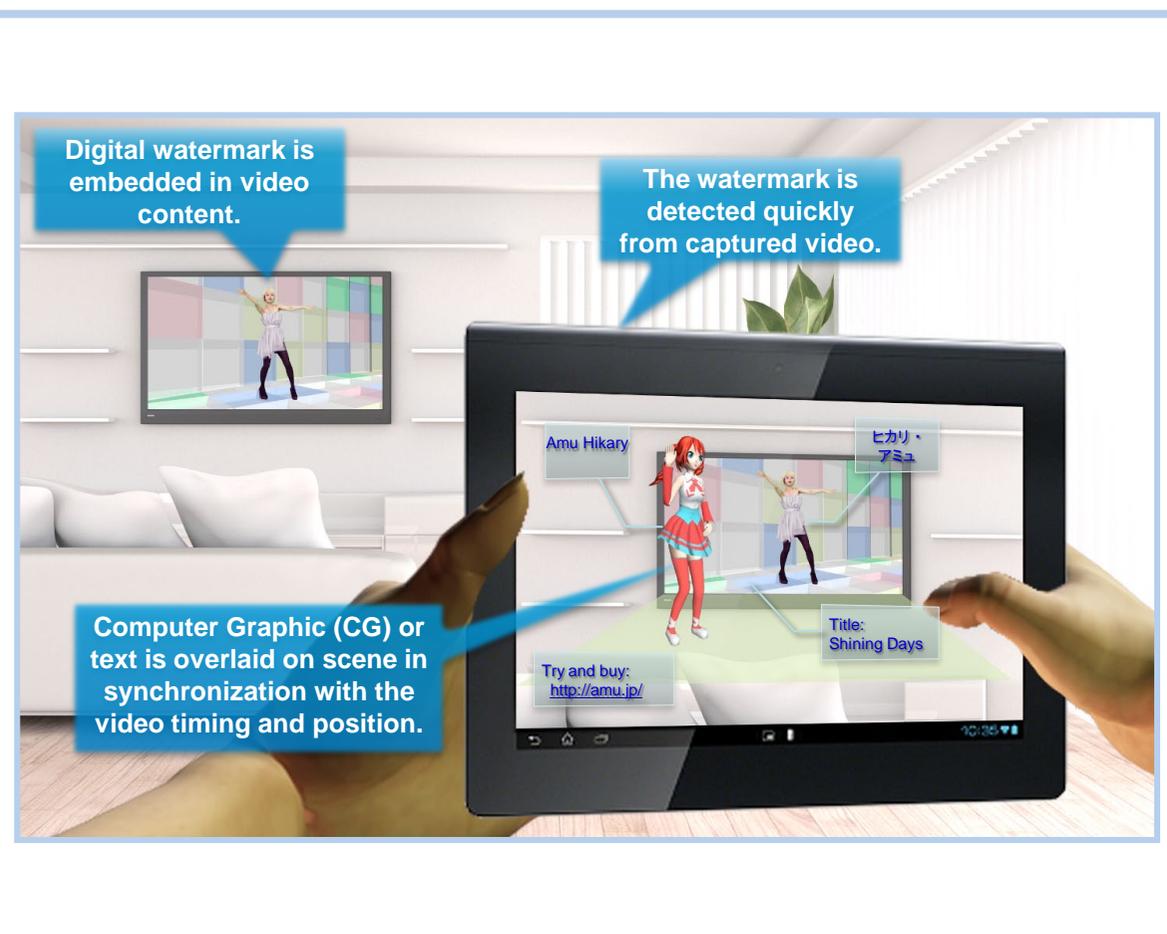


Dancing Synchronized with Video on Your Tablet: Visual SyncAR

Visual SyncAR, a novel AR (Augmented Reality^{*1}) technology, displays various kinds of information in synchronization with video timing and visual position using an embedded digital watermark^{*2}. This technology enables new visual experiences such as 3D characters that dance to artists' video clips when they are viewed through the camera of tablets or smartphones.



Features

- **Fast synchronization:** Playback timing is estimated by detecting watermark ID that varies scene by scene using mobile video watermark technology, which enables fast detection of watermarks even through a tablet/smartphone.
- **Trick play support:** Displays synchronized information or CGs even if the video is rewind or replayed.
- **AR overlay:** CG or other information is overlaid in a position on the screen following the camera motion using a function that quickly detects the screen area, even when it is captured sideways or from far away.

Application Scenarios

- Video entertainment services such as TV programs, music clips, etc.
- Personalized information services for digital signage, in which specific information is overlaid for individual viewers, e.g., a foreigner or hearing-impaired person.

NTT Group Global Advantage

NTT has developed the world's first video-synchronizing AR technology. This enables new visual experiences that combine video with other information.

*1 Augmented Reality: technology that allows computer generated virtual scenes to be combined with real scenes in a composite view in order to augment the real scene with additional information.

*2 Digital watermark: technology in which information such as a logo or ID number is embedded into original video media with minimal perceptual degradation.