

THE MUSIC PLAYER THAT CONVERTS STEREO TO PRODUCE SURROUNDING SOUND IN ALL AR ENVIRONMENT

BY PHILIP HA | NATIONALUX RESEARCH CENTER

PRODUCT SUMMARY

Nationalux invented the world's first surround-sound system which is able to produce theatre-like sound and audio enhancement effects for various sound and music sources. This cutting-edge audio technology creates auditory hallucinations of various sounds through the signal process and the position of the speaker. The stereoscopic sound consists of 4 channels producing three-dimensional sound (sound effect or music) that are delivered to the audience from different directions according to the sound range of the track being played through the speakers located in the front, side and rear of the auditorium.

In the process of live encoding or streaming of general sound data, Nationalux's surround sound system can convert it into surround sound and transmit the enhanced audio onto a website or mobile, enabling all images to be realized with Full HD Sound.

The system users can have their mobile phones diversify the sound content playback function by adding customized effects for different categories of music they are playing such as orchestra, choir and vocals. In particular, anyone can easily check and experiment how music by certain category is implemented through an intuitive UI implemented on all devices: PC & mobile phones.

This is the first AR music service platform utilizing Microsoft HoloLens. AR music service platform can recognize album covers, posters, QR code and other images through mobile or HoloLens as well as analyze downloaded or streamed MP3 frequency to deliver a more powerful and spectacular sound than previous stereos. The platform can up-mix the files to various audio signals like the 5.1-7.1 channel and distinguish the direction, volume and time-lag of the files.

3D sound can be controlled very easily by a simple touch or a hand motion for various sound effects. The platform is sure to become a pioneer for the next generation audio contents market. Previous multi-channel audio files can also be delivered or played through the platform.

This technology of 5 million songs music streaming service that is grand in scale and lossless will be launched in August simultaneously on Android, iOS and HoloLens. Upgraded diverse sound contents and premium benefits are available when the service is used through HoloLens.

KEY TECHNOLOGIES

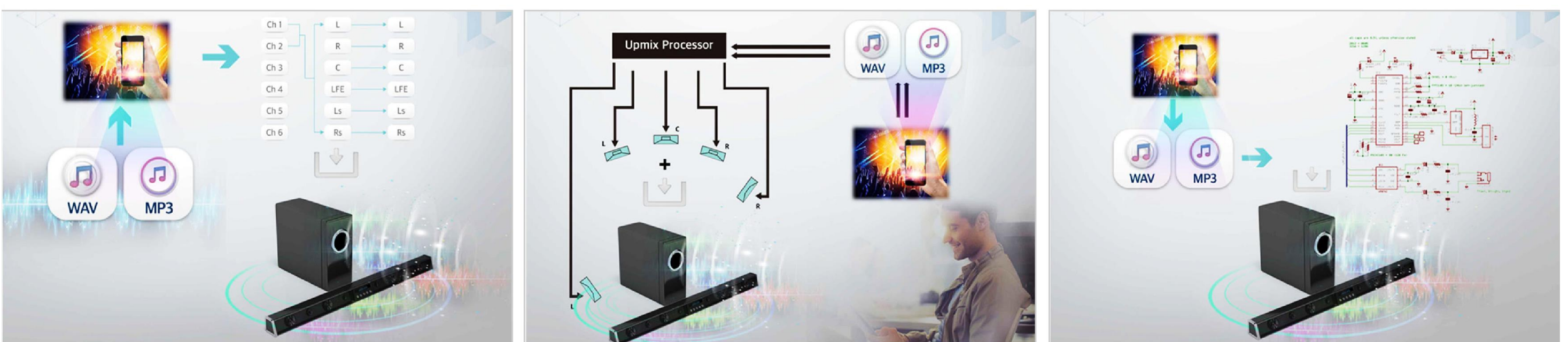
Technology 1: Broadcasting live streaming in 5.1 – 7.1 surround sound instead of normal stereo.



Technology 2: Manage and transmit videos in 5.1-7.1 surround sound instead of stereo. The system provides/manages contents with customized sound by opening individual channels for users.

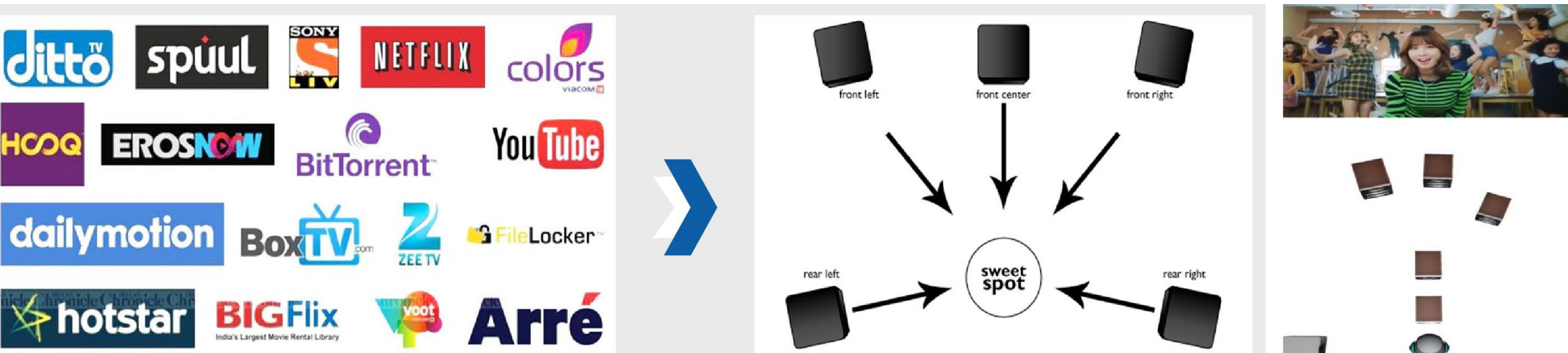
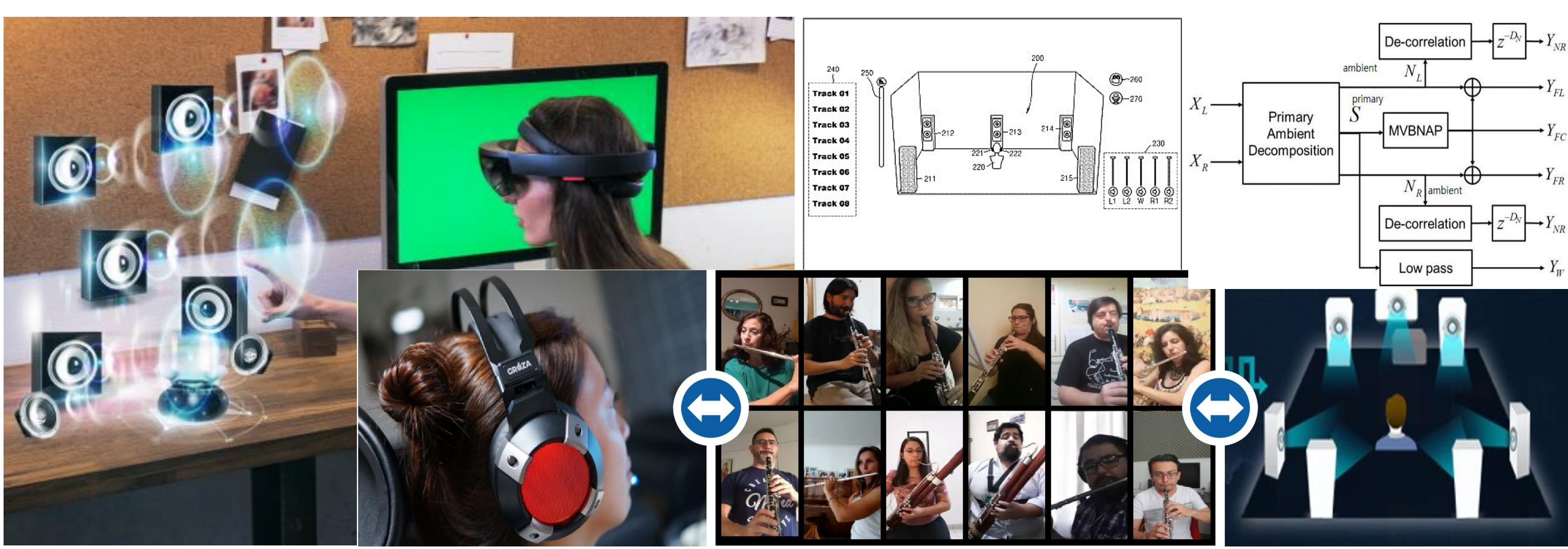


Technology 3: Surround sound implemented in mobile phone can be played through Bluetooth sound bar.



Nationalux's sound image fixing technology enables 3D effect to all music played on the Bluetooth sound bar, providing the best sound field quality which feels like listening to an orchestra playing right in front of you or in a real concert hall.

AWARD ACHIEVEMENTS



NATIONALUX TECHNOLOGY

- **World's first technology** for sound splitting and surround effect applied during video streaming
- **World's first technology** to implement surround sound in encrypted URL
- **World's first technology** to implement quantum object movement during real-time surround sound
- **World's first technology** for real-time surround effect without 0.1 second delay while video streaming
- **World's first technology** to implement multi-channel omni directional sound detection while video streaming



INVENTION PRESENTED BY
TISIAS - CANADA
 WEBSITE: www.tisias.org
 EMAIL: info@tisias.org
 FACEBOOK: **INVENTOR SOUND**

