three diminsional sound reproduction in Vehicles based on data mining techniques

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Abstract. The abstract should summarize the contents of the paper and should contain at least 70 and at most 150 words. It should be written using the *abstract* environment.

Keywords: Vehicles, sound, data mining, reproduction

1 Introduction

Sound systems for vehicle have been well researched by scientists and engineers. Akitoshi Yamada developed a sound reproduction system for vehicle using only two loudspeakers in 1982[1]. The system composed of a transfer function, a delay circuit, and a reverberation circuit. With the help of these components, a surrounding sound system was implemented.

The most there popular 3-D sound reproduction algorithms include Wave Field Synthesis(WFS), Ambisonics and Amplitude panning. WFS aims to reproduce the whole sound field and thus the real sound immersion was reproducted. However, WFS method is not practicle since there are too many loudspeakers requiered in WFS system. Ambisonics system

2 tree regression

3 three diminsional sound reproduction algorithm in Vehicles

4 experiment

5 conclusion

References

1. A. Yamada, "Sound reproduction system for motor vehicle," *Journal of the Acoustical Society of America*, vol. 72, no. 3, pp. 1101–1101, 1982.