



PERCEPTUAL HASHING ALGORITHM FOR SPEECH CONTENT IDENTIFICATION BASED ON SPECTRUM ENTROPY IN COMPRESSED DOMAIN

Zhang Qiu-yu, Liu Yang-wei, Huang Yi-bo, Xing Peng-fei and Yang Zhong-ping

School of Computer and Communication

Lanzhou University of Technology, 730050

Lanzhou, Gansu

Email: zhangqylz@163.com; cc1000cc@126.com

Submitted: Nov. 5, 2013

Accepted: Feb. 8, 2014

Published: Mar. 10, 2014

Abstract- This paper proposes a new perceptual hashing algorithm for speech content identification with compressed domain based on MDCT (Modified Discrete Cosine Transform) Spectrum Entropy. It aims primarily to solve problems of large computational complexity and poor real-time performance that appear when applying traditional identification methods to the compressed speeches. The process begins by extracting the MDCT coefficients, which are the intermediately decoded results of