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Lin et al.

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(54) **COMPRESSIVE SENSING SYSTEM BASED ON PERSONALIZED BASIS AND METHOD THEREOF**

(58) **Field of Classification Search**
CPC H04B 7/0456
See application file for complete search history.

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(57) **ABSTRACT**

Disclosed are a compressive sensing system based on a personalized basis and a method thereof; first a sensing end senses an original signal and transmits the original signal to a reconstruction end; the reconstruction end generates a personalized basis by means of a dictionary learning method; next, the sensing end is made to sample the original signal according to a sampling matrix to generate a compressed signal and transmit the compressed signal to the reconstruction end, so that the reconstruction end executes a compressive sensing reconstruction algorithm according to the personalized basis and the compressed signal to recover the compressed signal into the original signal, thereby achieving an effect of improving signal recovering quality and a compression ratio.

(51) **Int. Cl.**
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H04L 25/03 (2006.01)
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(52) **U.S. Cl.**
CPC **H04L 25/03299** (2013.01); **H04B 7/0456** (2013.01); **H04L 43/16** (2013.01)

10 Claims, 8 Drawing Sheets

