

**TITLE OF THE INVENTION: Method And System Of Identifying Breathing
Mode And Gait**

ABSTRACT

5 Described herein are methods and systems of identifying a breathing mode of a user and a gait of a user. The methods include obtaining an in-ear signal data of a user; filtering the in-ear signal data; segmenting the data; extracting a plurality of features; feeding the plurality of features to a trained machine learning model; obtaining a breathing mode estimation or a gait of the user.

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FIG. 19