

(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2024/0223210 A1 Pan et al.

Jul. 4, 2024 (43) **Pub. Date:**

(54) MEHOD FOR DEALING WITH RESPIRATORY FLOW DATA, AND COMPUTER THEREOF

(52) U.S. Cl. CPC H03M 7/4012 (2013.01); H03M 7/6011 (2013.01); *H03M* 7/70 (2013.01)

(71) Applicant: RESVENT MEDICAL

TECHNOLOGY CO., LTD, Shenzhen

(CN)

(72) Inventors: Haiyang Pan, Shenzhen (CN);

Rongrong Zhu, Shenzhen (CN)

Assignee: RESVENT MEDICAL

TECHNOLOGY CO., LTD, Shenzhen

(21) Appl. No.: 18/477,655

(22)Filed: Sep. 29, 2023

(30)Foreign Application Priority Data

Dec. 29, 2022 (CN) 202211710708.7

Publication Classification

(51) Int. Cl. H03M 7/40 (2006.01)H03M 7/30 (2006.01)

(57)ABSTRACT

A method for dealing with respiratory flow data includes steps of: performing integer processing on original flow data to obtain integer flow data; performing difference processing on the integer flow data to obtain difference flow data, the difference flow data having a plurality of difference values in order, the difference values having zero values, positive values, and negative values; when previous one difference value of the zero difference value or one positive difference value is negative, adding a marker value before the difference value that is zero or positive; when previous one difference value of the negative difference value is zero or positive, adding the marker value before the difference value that is negative; performing absolute value processing on the difference flow values to obtain the absolute values; and encoding the absolute values and the marker values to obtain encode flow data. A system using the method is also provided.

