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(54) Title: PORTABLE OXYGEN CONCENTRATOR SYSTEM AND METHOD INCLUDING CONCENTRATED OXYGEN FLOW DELIVERY

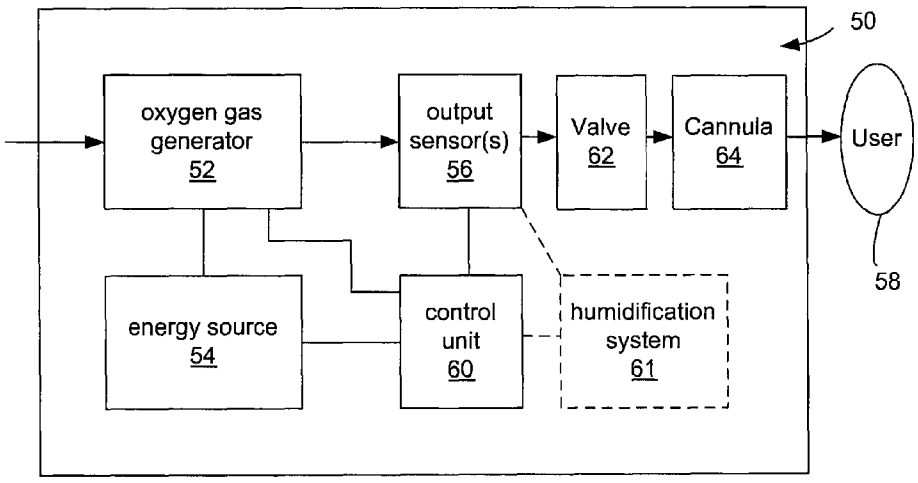

FIG. 1

(57) Abstract: A portable oxygen concentrator system weighing 4-20 pounds adapted to be readily transported by a user and for delivering oxygen to lungs of the user includes a rechargeable energy source; a concentrator powered by said energy source and adapted to convert ambient air into concentrated oxygen gas for said user; and a control unit that controls the concentrator to deliver a flow rate based on at least one of a Body Temperature Pressure Dry (BTPD) condition, a Body Temperature Pressure Saturated with water (BTPS) condition, and a condition between BTPD and BTPS, where relative humidity is 0-100%, to maintain a constant fraction of inspired oxygen (FI02) in the lungs of the user.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

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According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean Utility models and Applications for Utility models since 1975

Japanese Utility models and Applications for Utility models since 1975

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

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C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2002/0096174 A1 (Theodore B. Hill et al.) 25 July 2002 See the whole document.	1-15
A	US 4576616 A (Proto-Med. Inc.) 18 March 1986 See the whole document.	1-15
A	US 3834375 A (Del Mar Engineering Laboratories) 10 September 1974 See the whole document.	1-15
A	US 4822384 A (Teijin Limited) 18 April 1989 See the whole document.	1-15
A	US 6651658 B1 (SeQual Technologies, Inc. and Teijin Limited) 25 November 2003 See the whole document.	1-15

☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

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