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(54) **DIAGNOSIS AND/OR THERAPY USING BLOOD CHEMISTRY/EXPIRED GAS PARAMETER ANALYSIS**

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A61B 5/05 (2006.01)

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See application file for complete search history.

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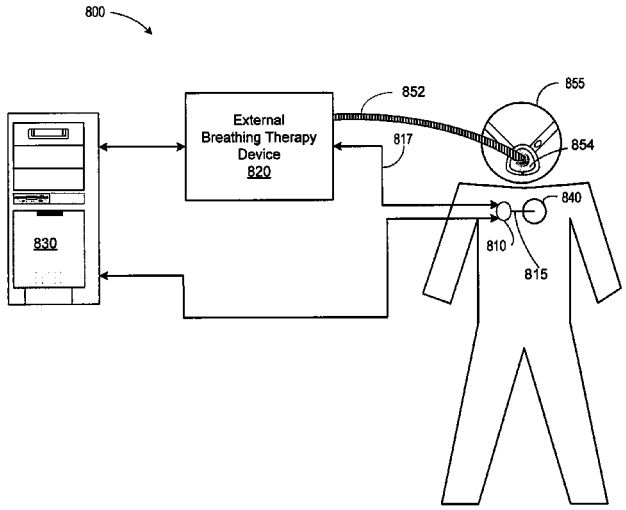
(57) **ABSTRACT**

Methods and systems for diagnosing disorders, including, for example, disordered breathing, involve sensing one or more of a blood chemistry parameter and/or an expired gas parameter, such as expired respiratory gas concentration, blood gas concentration, and blood pH. Diagnosis of the disorder may be performed by a medical device, such as a respiratory therapy device or a cardiac therapy device, based on implantably detected blood gas/pH concentration/level or externally detected expired respiratory gas concentration. Cardiac and respiratory therapies for addressing the disorder may be adjusted based on the detected parameters.

30 Claims, 14 Drawing Sheets