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Ho et al.

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(54) **PATIENT INTERFACE ASSEMBLY AND SYSTEM USING SAME**

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(51) **Int. Cl.**
A61M 16/06 (2006.01)
A62B 18/08 (2006.01)

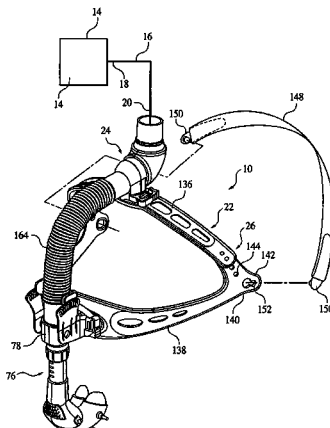
(52) **U.S. Cl.** **128/207.11; 128/207.13; 128/206.11**

(58) **Field of Classification Search** 128/207.11, 128/207.18, 204.11, 204.12, 204.24, 204.25, 128/205.11, 205.25, 206.11, 206.18, 207.13, 128/200.24, 200.29, 201.11, 201.27, 202.27, 128/204.18, 206.27, 207.17, 911, 912, DIG. 26
See application file for complete search history.

(57) **ABSTRACT**

A patient interface assembly that includes a patient interface device, a headgear, and coupling member joining the interface device to a headgear. In one embodiment, a spring biases the interface device against the face during use. In a further embodiment, the patient interface device is a nasal cushion having a formable support mounted to the nasal cushion for providing support and adjustment of the nasal cushion to improve fit and comfort. The headgear assembly in one embodiment is a semi-rigid, minimal contact harness and includes an adjustment assembly that allows for a simultaneous adjustment of multiple straps. An adjustment assembly on the headgear provides a gross adjustment of the position of the interface relative to the patient and a biasing force to urge the patient interface device against the patient's face. In a further embodiment, a pair of rigid connecting members couple the patient interface device to the headgear.

10 Claims, 25 Drawing Sheets



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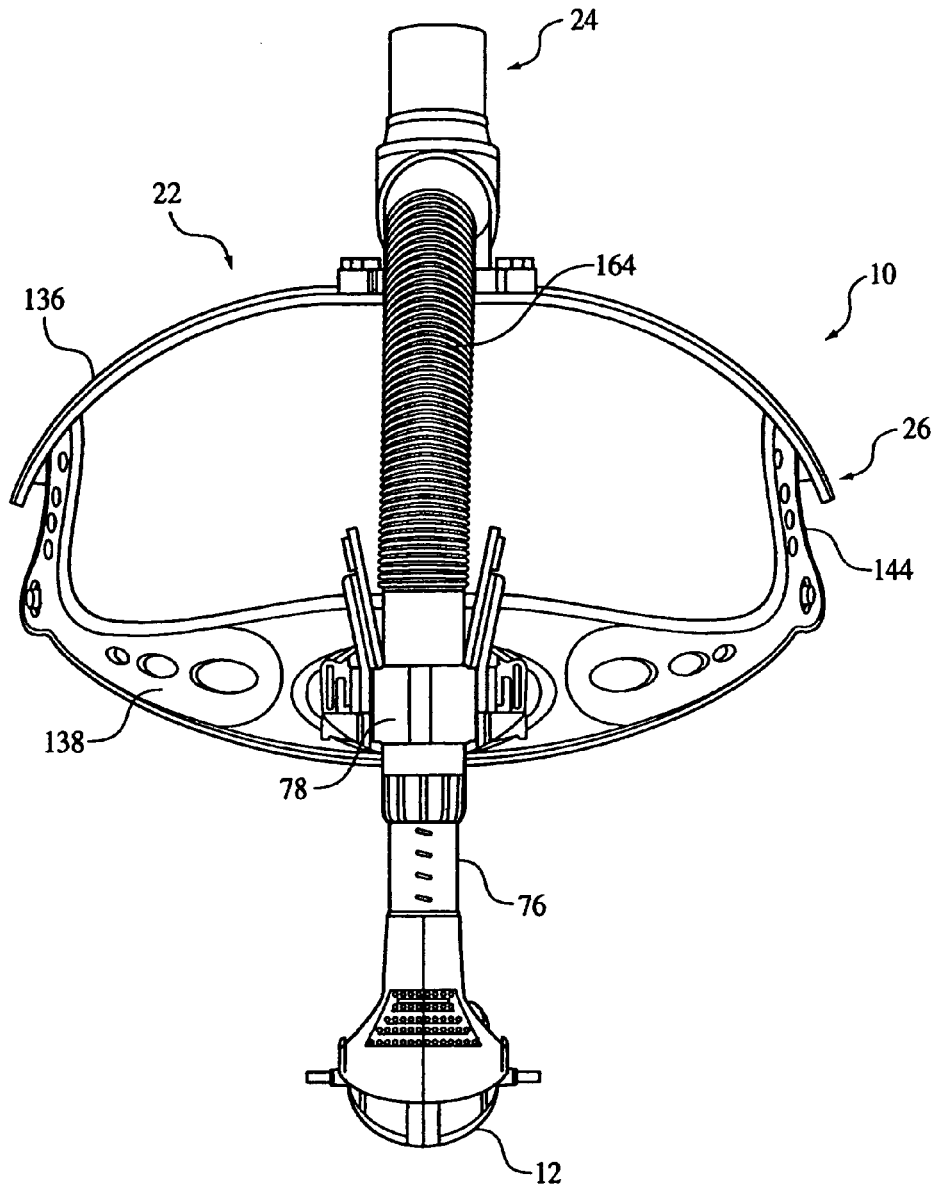


FIG. 2

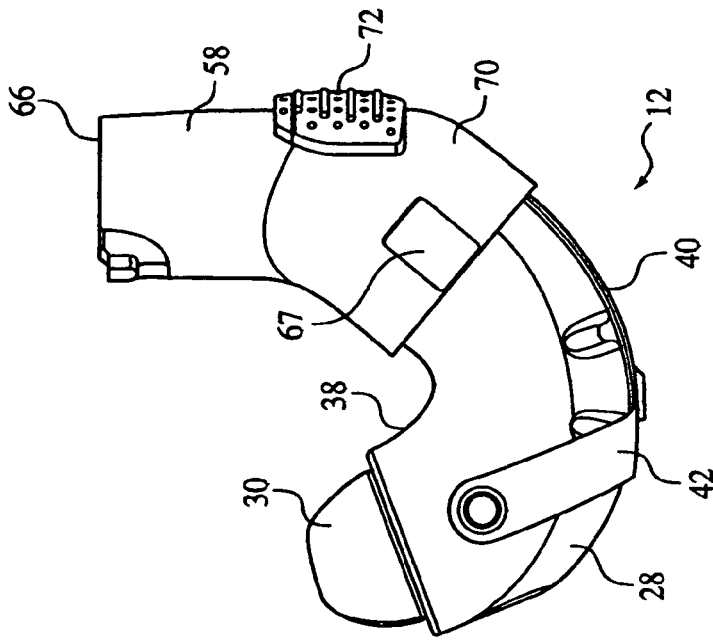


FIG. 4

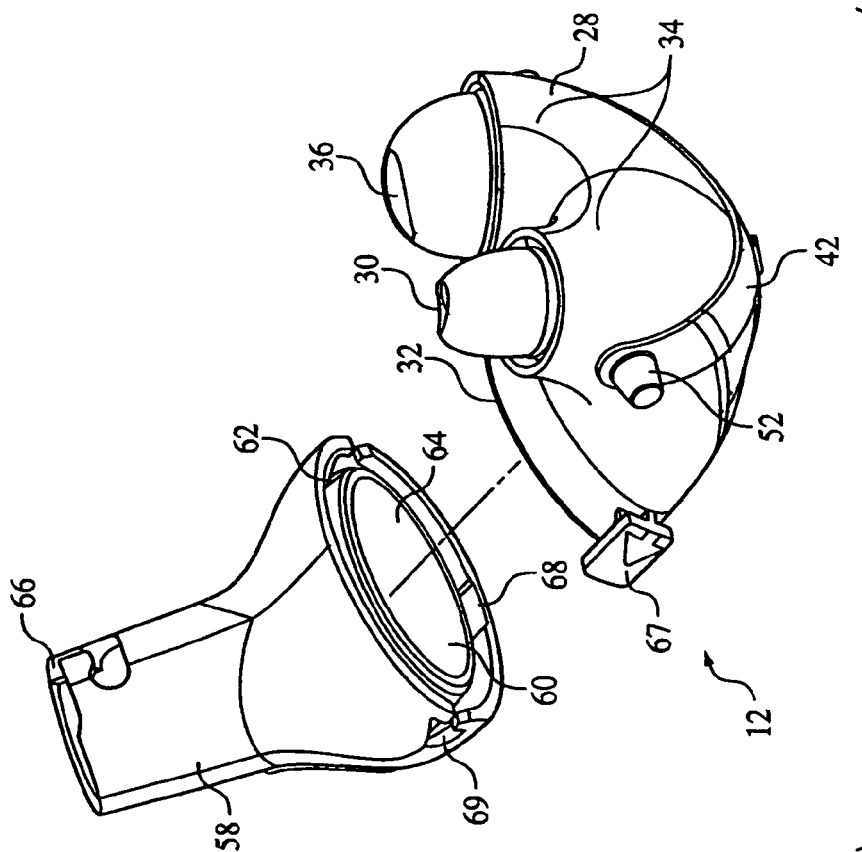


FIG. 3

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