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(12) **United States Patent**
Drew et al.

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(54) **RESPIRATORY MASK HAVING GAS
WASHOUT VENT AND GAS WASHOUT
VENT FOR RESPIRATORY MASK**

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(AU)

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(73) Assignee: **ResMed Limited**, North Ryde (AU)

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(*) Notice: Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 0 days.

Instruction Brochure for "E-Vent-N" ©Aug. 1997 Dräger
Medizintechnik GmbH, 2 pages.

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(21) Appl. No.: **09/570,907**

Primary Examiner—Aaron J. Lewis

(22) Filed: **May 15, 2000**

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(51) **Int. Cl.⁷** **A61M 16/00**

(57) **ABSTRACT**

(52) **U.S. Cl.** **128/204.18; 128/207.12;**
128/207.13

(58) **Field of Search** 128/200.29, 201.29,
128/204.18, 205.11, 207.12, 207.13

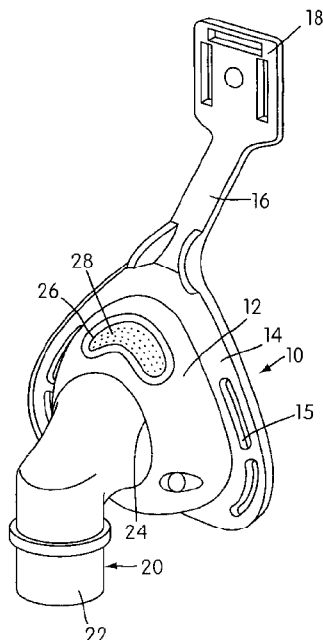
The present invention provides a vent assembly suitable for
use with a respiratory mask of the type used in CPAP
treatment. In one embodiment the vent is made of a thin air
permeable membrane. Generally, the membrane is thinner
than 0.5 mm. The membrane can be made of a hydrophobic
material such as polytetrafluoroethylene (PTFE). The mem-
brane can also be fabricated from expanded PTFE. The mem-
brane is mounted on a polypropylene
scrim. The pores of the membrane have a reference pore size
of 10 to 15 microns. In an alternative embodiment, the vent
assembly includes a vent constructed from stainless steel. In
another embodiment the membrane has a superficial cross-
sectional area of approximately 500 mm². In another
embodiment the vent assembly comprises a membrane
attached to a vent frame, the vent assembly forming an insert
which can be removeably attached to a mask frame.

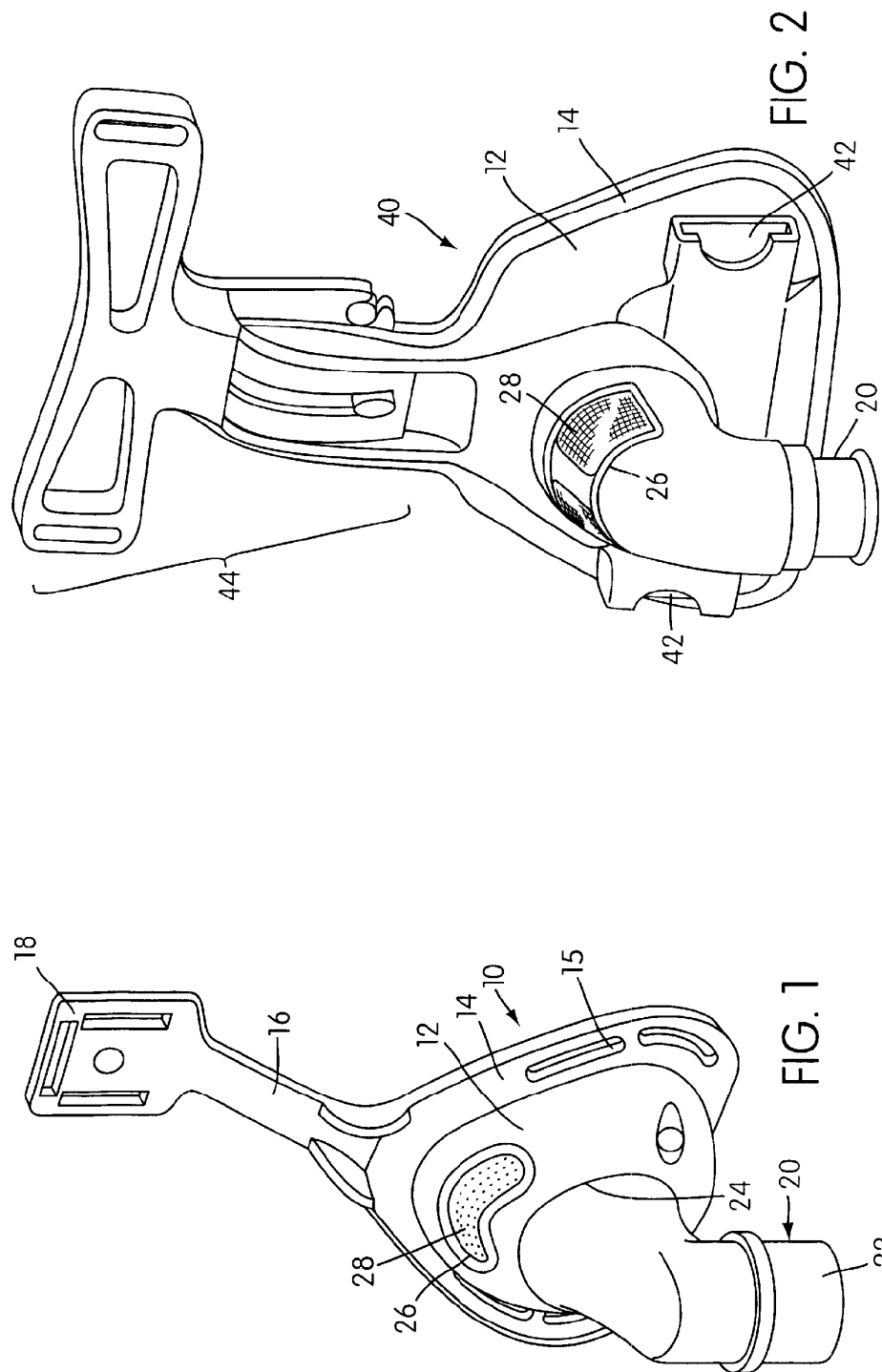
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8 Claims, 4 Drawing Sheets





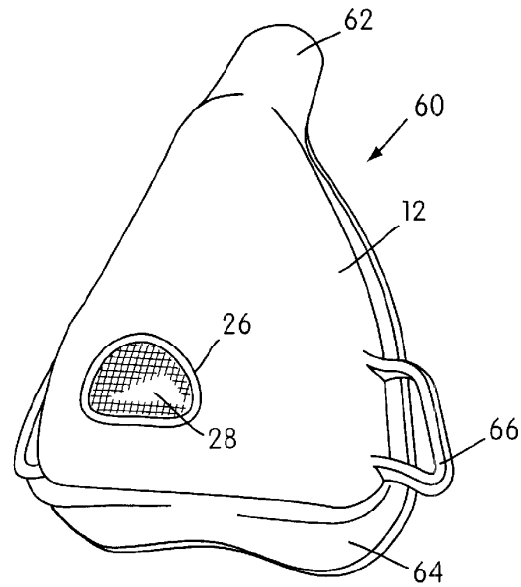


FIG. 3

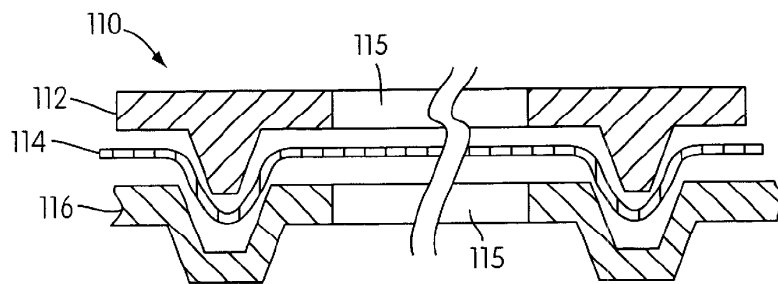


FIG. 4

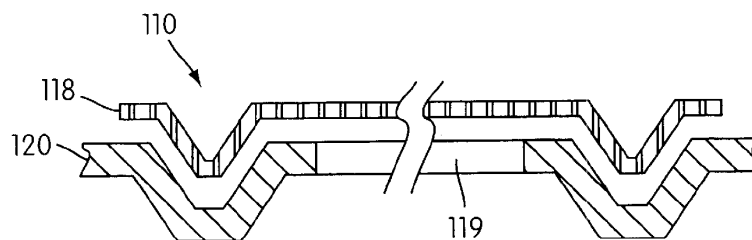


FIG. 5

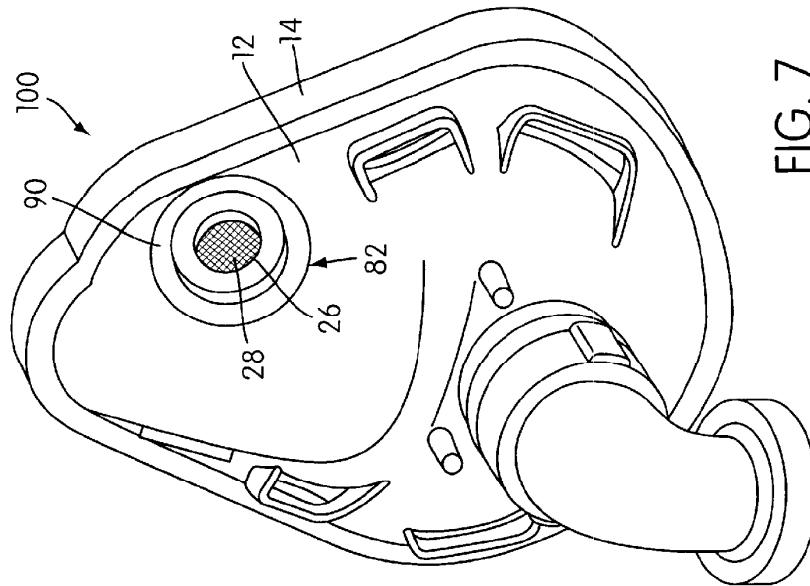


FIG. 7

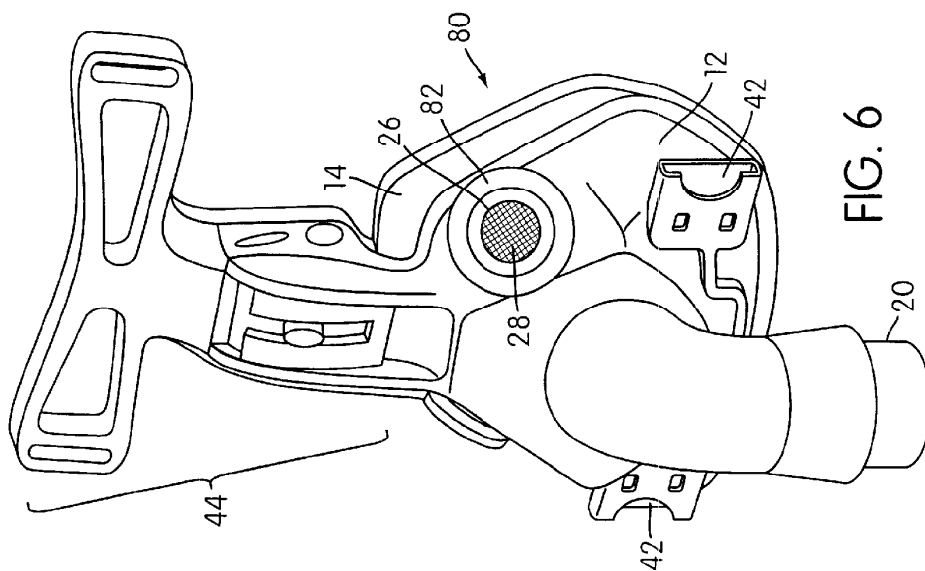
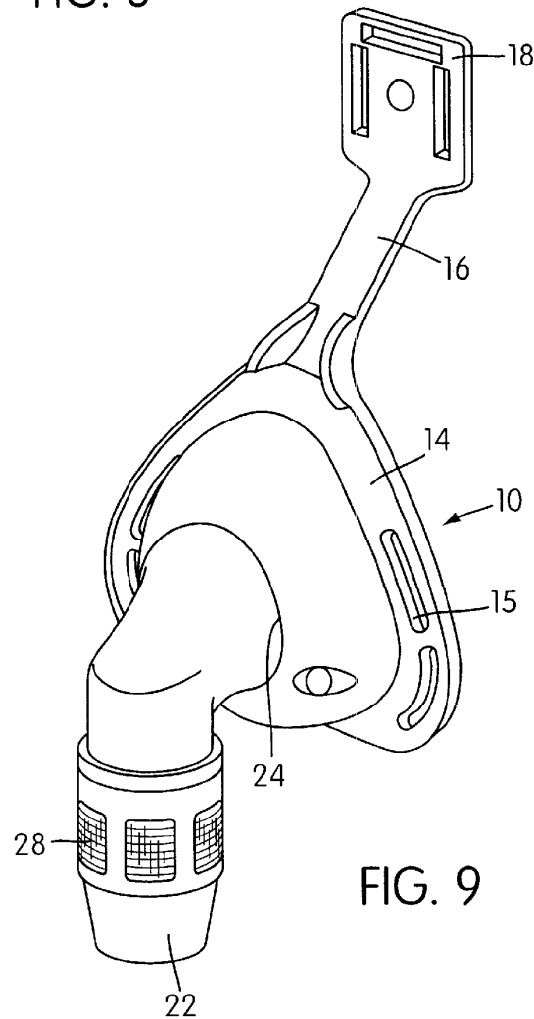
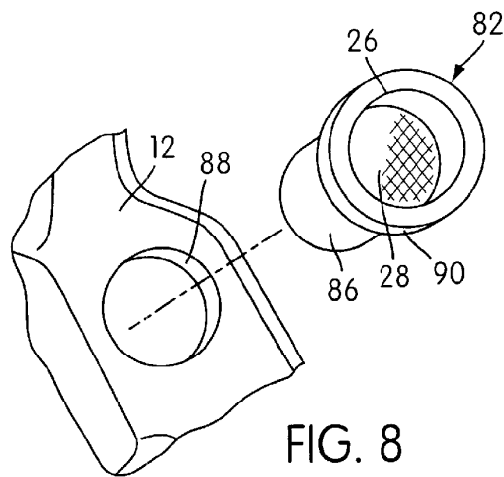


FIG. 6



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