US009510969B2

(12) **United States Patent**
Castillo

(10) **Patent No.: US 9,510,969 B2**
(45) **Date of Patent: Dec. 6, 2016**

(54) **NASAL ELEMENT FOR A BREATHING SYSTEM**

(71) Applicant: **James D. Castillo**, Los Alamos, CA (US)

(72) Inventor: **James D. Castillo**, Los Alamos, CA (US)

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

(21) Appl. No.: **14/628,517**

(22) Filed: **Feb. 23, 2015**

(65) **Prior Publication Data**

US 2015/0182370 A1 Jul. 2, 2015

Related U.S. Application Data

(63) Continuation of application No. 14/502,348, filed on Sep. 30, 2014.

(60) Provisional application No. 61/918,826, filed on Dec. 20, 2013, provisional application No. 61/937,018, filed on Feb. 7, 2014.

(51) **Int. Cl.**
A61F 5/08 (2006.01)
A61F 9/02 (2006.01)

(52) **U.S. Cl.**
CPC ***A61F 5/08*** (2013.01); ***A61F 9/026*** (2013.01); ***A61F 9/029*** (2013.01)

(58) **Field of Classification Search**
CPC A61F 5/08; A61F 5/56
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

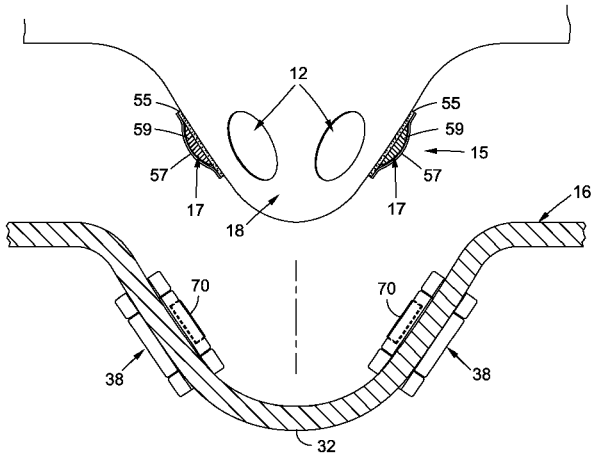
3,835,848 A 9/1974 Berner
5,533,503 A 7/1996 Doubek et al.
5,913,873 A 6/1999 Blach et al.
6,006,746 A 12/1999 Karell
6,033,422 A 3/2000 Blach et al.
6,352,548 B1 3/2002 Blach et al.
6,533,412 B1 3/2003 Wang et al.
6,676,681 B1 1/2004 Blach et al.
6,823,864 B2 11/2004 Blach et al.
7,091,634 B2 8/2006 Yi et al.
7,793,661 B2 * 9/2010 Macken A61F 5/56 128/846
D639,762 S 6/2011 Brogden et al.
D644,324 S 8/2011 Brunner et al.
D644,325 S 8/2011 Brunner et al.
8,042,542 B2 10/2011 Ging et al.
D696,400 S 12/2013 Brogden et al.
D701,957 S 4/2014 Brunner et al.
D703,318 S 4/2014 Brunner et al.
(Continued)

OTHER PUBLICATIONS

International Search Report and Written Opinion for International Application No. PCT/US14/69817, Mar. 11, 2015, 11 pages.

Primary Examiner — Katherine M Shi
Assistant Examiner — Michael Mendoza
(74) *Attorney, Agent, or Firm* — Stetina Brunda Garred and Brucker

(57) **ABSTRACT**

Provided is a goggle kit including a goggle clip attachable to the goggle frame, and a corresponding nose element, which adheres to the user's nose. The nose element and the goggle clip are configured to be detachably engageable therewith, such that when the nose element is placed on the user's nose and the goggle is placed over the user's eyes, the goggle clip and nose element may be engaged with each other, thereby urging the nasal opening of the user to dilate.

30 Claims, 7 Drawing Sheets