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

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(54) **INHALED HYPERTONIC SALINE
DELIVERED BY A HEATED NASAL
CANNULA**

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(58) **Field of Classification Search**

None

See application file for complete search history.

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(57) **ABSTRACT**

The invention described herein is directed to method of treating chronic obstructive pulmonary disease, comprising administering an effective amount of an osmolyte by at least one nasal cannula to a subject in need thereof. Also provided is a nasal cannula system for delivering an osmolyte, comprising a nebulizer and tubing having two ends, where the first end of the tubing is connected to the nebulizer and the second end of the tubing is tapered to fit in the nostril of a subject.

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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 330 days.

This patent is subject to a terminal disclaimer.

(21) Appl. No.: **14/047,281**

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(65) **Prior Publication Data**

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(51) **Int. Cl.**

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CPC *A61M 15/08* (2013.01); *A61M 11/001*

25 Claims, 1 Drawing Sheet

