

Title (en)
BRAIDED HOSE FOR USE IN SLEEP APNEA TREATMENT SYSTEMS THAT DECOUPLES FORCES

Title (de)
GEFLOCHTENER SCHLAUCH ZUR VERWENDUNG IN SYSTEMEN FÜR DIE BEHANDLUNG VON SCHLAFAPNOE ZUR ENTKOPPLUNG VON KRÄFTEN

Title (fr)
TUYAU TRESSÉ DESTINÉ À ÊTRE UTILISÉ DANS DES SYSTÈMES DE TRAITEMENT DE L'APNÉE DU SOMMEIL QUI DÉCOUPLE DES FORCES

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- US 2018051399 W 20180917

Abstract (en)
[origin: WO2019245593A1] A hose is described that includes a braided matrix with an interior lumen. The matrix also includes filaments that intersect each other creating a braid, a longitudinal axis that runs along the lumen and the filaments intersect the longitudinal axis at a braid angle. The braid angle can be varied by compressing or expanding the matrix along the direction of the longitudinal axis. A polymer coating is applied to the matrix such that the matrix is substantially impermeable to air. The hose has two states: (1) a relaxed state where the hose does not experience a force in the direction of the longitudinal axis; and (2) a stressed state where the hose experiences a force in the direction of the longitudinal axis. The braid angle is larger in the relaxed state as compared to the stressed state. A method of manufacture for the hose is also disclosed.

IPC 8 full level
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Citation (search report)

- [X] WO 2014070034 A1 20140508 - ALYAVDIN DMITRY VYACESLAVOVICH [RU]
- [A] EP 3133328 A1 20170222 - RAGNER TECH CORP [US]
- [A] US 2017226671 A1 20170810 - ZHANG ZHONG HUI [US], et al
- See references of WO 2019245593A1

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