CUSTOMIZABLE RESPIRATORY MASK

ABSTRACT

A customizable mask including a conforming seal is configured to utilize the physical process of granular jamming to enable it to adapt to a wide range of facial geometries. The mask may include a frame having a perimeter and a conduit connection, a conforming seal positioned along the perimeter of the frame; the conforming seal may include a sealing surface and a connecting surface, the connecting surface configured to mate with the perimeter of the frame, and the sealing surface configured to conform to a users' face. The conforming seal may further include an outer casing, granular material contained within the outer casing, and a vacuum connection. The mask may also include a similarly configured conforming frame. Further disclosed are methods of forming such masks

(FIG. 4b)