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(54) ZERO ACOUSTIC SPLICE FAN CASE LINER (75) Inventors: Mark W. Costa, Storrs, CT (US); Charles Brown, East Hampton, CT (US); Andrew S. Foose, Vernon, CT (US) Assignee: United Technologies Corporation, Hartford, CT (US) (*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 517 days. (21) Appl. No.: 10/899,809 (22)Filed: Jul. 27, 2004 **Prior Publication Data** (65)US 2006/0024154 A1 Feb. 2, 2006

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See application file for complete search history.

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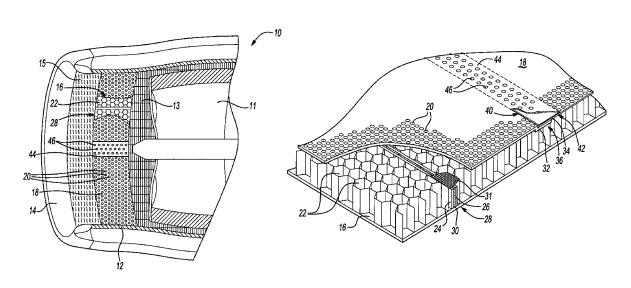
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(57) ABSTRACT

A liner assembly for a fan case includes a noise attenuation layer covered by a face sheet. The face sheet includes openings to the underlying noise attenuation layer. The face sheet and noise attenuation layer include acoustically transparent joints. The noise attenuation layer includes a first side joined to a second side at a seam by an adhesive strip. The adhesive strip bonds the first side to the second side without filling any chambers. The face sheet includes a joint filled with an adhesive providing the desired uninterrupted surface within the fan case. Openings are formed through the joint and the adhesive to communicate with the underlying noise attenuation layer. The joint and seam become essentially transparent acoustically to improve noise attenuation performance.

15 Claims, 2 Drawing Sheets



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