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**Xu et al.**

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(54) **ARTICLE WITH NONWOVEN WEB COMPONENT FORMED WITH LOFT-ENHANCING CALENDAR BOND SHAPES AND PATTERNS**

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See application file for complete search history.

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(57) **ABSTRACT**

An article having as a component a section of nonwoven web formed predominately of polymeric fibers is disclosed. The section of nonwoven web may have a pattern of consolidating bonds impressed on the surface. The bonds may have at least one bond shape; and the bond shape may have a perimeter with a greatest measurable length and greatest measurable width. The perimeter may have a convex portion and an aspect ratio of length/width of at least 2.5. Other features may be imparted relating to the density and orientations of the bonds relative machine and cross directions of the web. The bond shape reflects the shape of a corresponding bonding protrusion on a bonding roller. It is believed that the shape, density and/or orientation of the bonding protrusions affect air flow through the bonding nip in a way that may be utilized to enhance loft of the resulting bonded nonwoven web.

**16 Claims, 13 Drawing Sheets**

