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Pourdeyhimi et al.

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(54) **SYSTEM AND METHOD FOR REDUCING JET STREAKS IN HYDROENTANGLED FIBERS** 4,069,563 A * 1/1978 Contractor et al. 28/105
4,146,663 A 3/1979 Ikeda et al.

(75) Inventors: **Behnam Pourdeyhimi**, Cary, NC (US);
Hooman Vahedi Tafreshi, Raleigh, NC (US);
Nagendra Anantharamaiah, Raleigh, NC (US)

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(73) Assignee: **North Carolina State University**, Raleigh, NC (US)

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Primary Examiner—Amy B Vanatta
(74) *Attorney, Agent, or Firm*—Alston & Bird LLP

Related U.S. Application Data

(57) **ABSTRACT**

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D04H 1/46 (2006.01)

(52) **U.S. Cl.** 28/104; 28/167

(58) **Field of Classification Search** 28/104,
28/105, 106, 167; 239/556, 560, 561, 558,
239/554; 68/205 R

See application file for complete search history.

A system for hydroentangling a fabric material, while reducing the incidence of jet streaks therein, is provided. Various embodiments of the present invention provide an elongate hydroentangling jet strip spaced apart from the fabric material and extending substantially across a width of the fabric perpendicular to the processing direction. The strip defines a first row of orifices, each having a first diameter. The first plurality of orifices is spaced apart along a width of the elongate strip. The strip further defines a second plurality of orifices disposed downstream from the first plurality of orifices in the processing direction and offset therefrom along the width of the elongate strip. The second plurality of orifices each define a second diameter smaller than the first diameter such that fluid streams generated thereby impart a correspondingly smaller impact force on the fabric material than fluid streams generated by the first plurality of orifices.

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35 Claims, 14 Drawing Sheets

