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(54) **ABSORBENT ARTICLES COMPRISING WETNESS INDICATORS**

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This patent is subject to a terminal dis-
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(56) **References Cited**

U.S. PATENT DOCUMENTS

3,563,243 A 2/1971 Lindquist
3,860,003 A 1/1975 Buell

(Continued)

FOREIGN PATENT DOCUMENTS

EP 148115 A1 7/1985
EP 0818569 A2 1/1998

(Continued)

OTHER PUBLICATIONS

ISR and Written Opinion, PCT/US2010/030791, date of mailing
Jul. 29, 2010.

(Continued)

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(57) **ABSTRACT**

An absorbent article of the present invention may comprise a backsheet, a wetness indicator composition, and an absorbent core. The wetness indicator composition may comprise a stabilizer, a colorant, and a matrix. The absorbent core may comprise a nonwoven layer and an absorbent polymer material, and optionally, a thermoplastic adhesive material. The wetness indicator composition may be in direct contact with an inner surface of the backsheet and an outer surface of the nonwoven layer. And, the absorbent polymer material, and optionally, the thermoplastic adhesive material, may be in direct contact with an inner surface of the nonwoven. Further, the absorbent core may be substantially cellulose free and may be oriented in at least one row.

20 Claims, 1 Drawing Sheet

