

Title (en)
Electrostatically and acoustically assisted coating method and apparatus

Title (de)
Elektrostatisch und akustisch gestütztes Beschichtungsverfahren und Vorrichtung

Title (fr)
Procédé et appareil de revêtement assistés électrostatiquement et acoustiquement

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Abstract (en)
A system for applying a fluid coating onto a substrate includes forming a fluid wetting line by introducing a stream of fluid onto a first side of the substrate along a laterally disposed fluid-web contact area. The apparatus of the present invention comprises a coating fluid applicator which dispenses a stream of coating fluid onto a first surface of the substrate to form a fluid wetting line along a laterally disposed fluid contact area, an electrical field applicator which applies an electrostatic field at a location on the substrate adjacent the fluid wetting line to attract the coating fluid to the first surface of the substrate, and an acoustical field applicator which applies an acoustical field at a location on the substrate adjacent the fluid wetting line. Ultrasonics combined with electrostatic fields further enhances coating process conditions and coating uniformity.

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WO 0176769 A2 20011018; WO 0176769 A3 20020627; AT E298272 T1 20050715; AT E340035 T1 20061015; AU 4333301 A 20011023; AU 4958001 A 20011023; BR 0109830 A 20030121; BR 0109830 B1 20110405; BR 0109879 A 20030603; BR 0109879 B1 20110906; CA 2402969 A1 20011018; CA 2404220 A1 20011018; CN 100379498 C 20080409; CN 1429138 A 20030709; CN 1429138 B 20120530; CN 1433340 A 20030730; DE 60111632 D1 20050728; DE 60111632 T2 20060518; DE 60123230 D1 20061102; DE 60123230 T2 20070913; EP 1274515 A2 20030115; EP 1274515 B1 20060920; EP 1280614 A2 20030205; EP 1280614 B1 20050622; EP 1611963 A1 20060104; JP 2003530214 A 20031014; JP 2003530215 A 20031014; KR 100715166 B1 20070511; KR 20030007497 A 20030123; KR 20030007498 A 20030123; MX PA02009842 A 20030527; MX PA02009852 A 20030527; TW 527228 B 20030411; TW 553776 B 20030921; WO 0176770 A2 20011018; WO 0176770 A3 20020228

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