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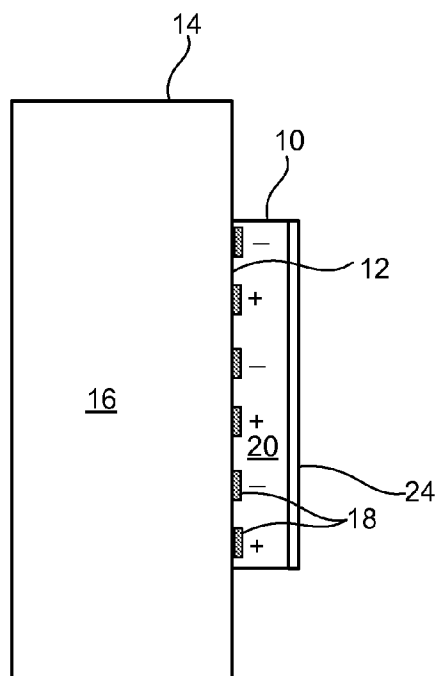
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(54) Title: ELECTROADHESION



(57) Abstract: Described herein is electroadhesion technology that permits controllable adherence between two objects. Electroadhesion uses electrostatic forces of attraction produced by an electrostatic adhesion voltage, which is applied using electrodes (18) in an electroadhesive device. The electrostatic adhesion voltage produces an electric field and electrostatic adherence forces. When the electroadhesive device and electrodes are positioned near a surface of an object such as a vertical wall (14), the electrostatic adherence forces hold the electroadhesive device in position relative to the surface and object. This can be used to increase traction or maintain the position of the electroadhesive device relative to a surface. Electric control of the electrostatic adhesion voltage permits the adhesion to be controllably and readily turned on and off.

Figure 2



GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C DOCUMENTS CONSIDERED TO BE RELEVANT

Category ♦	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
X	US 4,257,083 (BLYTH) 17 March 1981 (17 03 1981), Figs 2 & 3	1-3, 6, 8-11, 25, 37, 38, 41 & 45
X	US 3,634,740 (STEVKO) 11 January 1972 (11 01 1972), Fig 4	1, 4, 15 & 22-24
X	US 5,745,331 (SHAMOUILIAN ET AL) 28 April 1998 (28 04 1998), Fig 2b	1, 5, 14, 17-20, 25, 30-34 & 41-44
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		12, 13, 39 & 40
X	US 5,090,643 (SPEARS) 25 February 1992 (25 02 1992), Fig 3	1, 15, 16, 25 & 35
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Y	(US 6,376,795) (ZOLA) 23 April 2002 (23 04 2002), column 9, lines 13-18	12 & 13

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category •	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
Y	US 6,781,812 (FUWA ET AL) 24 August 2004 (24 08 2004), Fig 7e	39 & 40
A	US 2007/0285870 A1 (SHIM) 13 December 2007 (13 12 2007), Fig 2	21