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(71) Applicant (for all designated States except US): **BAE SYSTEMS PLC** [GB/GB], Warwick House, P.O. Box 87, Farnborough Aerospace Centre, Farnborough, Hampshire GU14 6YU (GB).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **BEGGS, Kevin, William** [GB/GB]; 33 Vermont Grove, Blackpool FY5 3RL (GB). **JARVIS, Paul, Edward** [GB/GB]; 9 Scale Hall Lane, Newton-with-Scales, Preston, Lancashire PR4 3TL (GB). **DOUGLAS, Anthony, James** [GB/GB]; 8

Sheep Hill Lane, New Longton, Preston PR4 4ZN (GB). **ABBOTT, Carl, John** [GB/GB]; 53 Beech Grove, York YO26 5JY (GB).

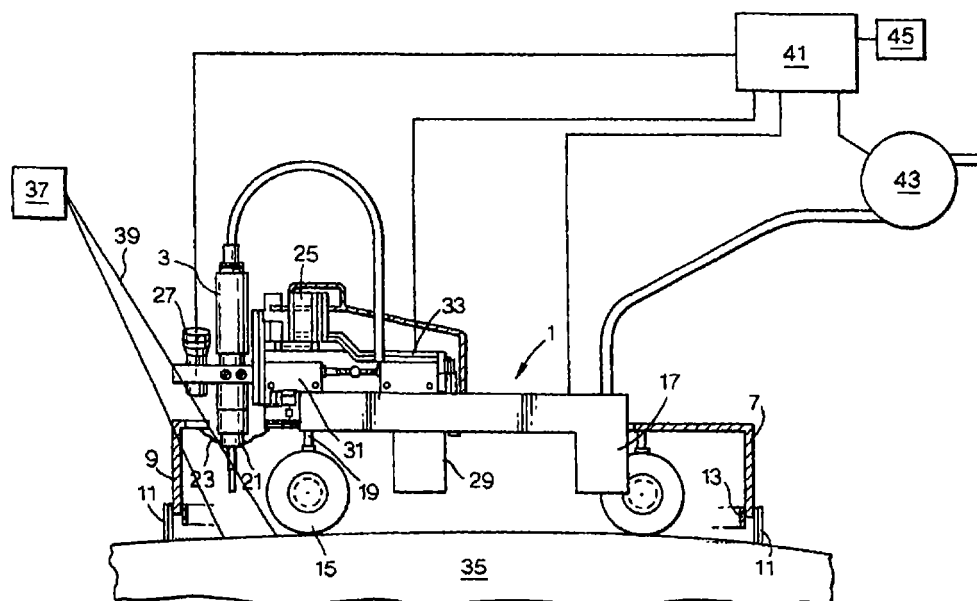
(74) Agent: **MACLEAN, Martin, David**; BAE Systems plc, Group IP Department, Farnborough Aerospace Centre, Lancaster House, P.O. Box 87, Farnborough, Hampshire GU14 6YU (GB).

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(54) Title: TOOL POSITIONING SYSTEM



(57) Abstract: Apparatus for positioning and holding a tool (3) relative to a workpiece (35) comprising a carriage (1) for conveying the tool over the surface of the workpiece (35) and means (7, 9, 11, 13) for holding the carriage (1) onto the surface of the workpiece (35), the holding means being selectively switchable between a low grip state in which the carriage (1) is held against the workpiece surface whilst remaining capable of movement relative thereto and a high grip state in which the carriage (1) is held substantially fixedly to the workpiece surface for the tool (3) in use to operate thereon. Such an arrangement provides a robot capable of "crawling" over a workpiece (35) and carrying out precise manufacturing operations thereon.

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