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PATENTS

Patent applications in automation and robotics

Patent #	Subject	Assignee	Author	Date	Status*
WO 9732892	Composite for combinatorial organic synthesis comprising material bound to support—has readable marker identifying the material, and similar markers to identify materials used in each synthesis step, particularly for drug development.	Imperial College of Science, Technology & Medicine (London)	Barrett AGM	09/12/1997	A1
US 5664322	Robotic apparatus for palletized small parts, e.g., lenses and semiconductor class 10 processing—has vertical space between two adjacent guide blocks for guiding rotational alignment in vertical magazine.	Best ND	Best ND	09/09/1997	A
US 5655660	Low-cost, waste-reducing pharmaceutical distribution container used with robotic drug-retrieval system—has easily loaded tray with four inclined, trapezoidal, connected walls penetrated on opposite sides by rod suspending pharmaceutical packs and part enclosed in horizontal sleeve.	Allen MD, Dolin LM	Allen MD, Dolin LM	08/12/1997	A
RD 400042 A	Ultrasonic robotic sprayer depositing small set volumes of atomized liquid sample onto defined area—useful for testing agricultural or pharmaceutical products.	Anonymous		08/10/1997	A
US 5641093	Robotic system for dispensing pharmaceuticals—has tray encased in sleeve and removable rod securing packets of pharmaceuticals in tray.	Allen MD, Dolin LM	Allen MD, Dolin LM	06/24/1997	A
WO 9715494	Automatic filling of multichamber packages for clinical studies—uses imaging device to check correct filling of individual chambers according to specification.	Fleximation AG (Zürich)	Vogelsanger M	05/01/1997	A1
WO 9710502	High-throughput competitive binding assay—for screening compounds, e.g., (ant)agonists, able to bind a fusion protein in which a target protein is fused to FK506 binding protein.	Merck & Co. Inc. (Rahway, NJ)	Salowe SP	03/20/1997	A1
WO 9710253	Screening compounds for binding to fusion proteins with defined ligands—allows high-capacity assays and identification of (ant)agonists or inhibitors for drug development.	Merck & Co. Inc. (Rahway, NJ)	Marcy A, Salowe SP, Wisniewski D	03/20/1997	A1
US 5490415	Diffusion apparatus for use with membrane in testing transdermal drug-transport delivery systems—secures receiver assembly to donor assembly via clip with corresponding receptacles aligned in mirror-image with each other, with matching annular recesses where assemblies sandwich test membrane.	Pharmetrix Corp. (Pompano Beach, FL)	Francoeur ML, Mak VHW	02/13/1996	A
DE 4424307	Simultaneous, multiple solid-phase synthesis of peptide(s) or other bioorganic polymers, with mixing and distribution of all reaction mixtures and reagents by a robotic pipetter.	BioTez Berlin-Buch GmbH, Biochemisch-Tech. (Berlin)	Haenel J	01/11/1996	A1
US 5477663	Automatic tray-loading system for high-speed processing of pharmaceutical vials—uses robotic arm to deliver rows of vials from pickup station to tray-loading station in a predetermined control sequence.	West Co.	Birtwell JD, Covert WJ, Melton RB, Shoup E, Sirgenson PW, Smith BD, Stalnaker TA Sykes BF, Tammaro FC, Vander Bush EF	12/26/1995	A
US 5454775	Automated feeding system for exchangeable parts, e.g., for food, pharmaceutical, electronics industries, etc.—has parts presentation device with attached tool exchange device, robot arm for grasping presentation device from base unit, and control source coordinating movements.	Applied Robotics Inc. (Glenville, NY), Robotic Production Methods Inc.	Annis CC, Cullen PW, Petronis TJ, Ross EM, Cullen WP	10/03/1995	A
GB 2281122	Detecting compounds that bind to receptor or modulate ligand binding; for screening of compounds for pharmaceutical or agrochemical activity.	Zeneca Ltd. (London)	Garman AJ	02/22/1995	A
WO 9009776	System for transferring drugs from vials into containers of solute; automatically transfers vials, containers, and transfer needles from respective storage locations to process unit.	Zezulka BJ, Fincati AM, Red Deer Regional Hospital, Voss HH, Alberta Research Council (Calgary, Alberta, Canada)	Fincati AM, Voss HH, Zezulka BJ, Zezulka B	09/07/1990	A
US 4628928	Robotic implantable medical device and restoration system—has circuitry provided to initiate and control servicing operation.	Medtronic Inc. (Minneapolis, MN)	Lowell DJ	12/16/1986	A

Source: Derwent Information, Alexandria, VA. *The patents in the table are pending. The status of each application is slightly different from country to country. For further details, contact Derwen Information, 1725 Duke St., Suite 250, Alexandria, VA 22314. Tel: 1 (800) DERWENT (info@derwent.com).