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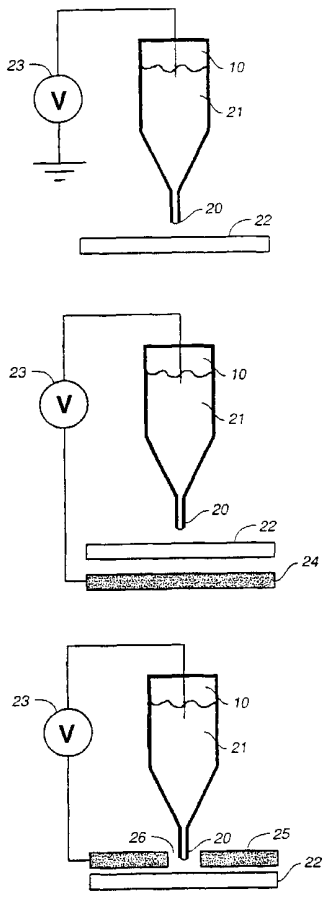
[Continued on next page]

(54) Title: ELECTROSTATIC SYSTEMS AND METHODS FOR DISPENSING DROPLETS

(57) Abstract: In accordance with the present invention there is provided an apparatus for electrostatically dispensing small volumes of biological or chemical material from a dispensing tip or array of dispensing tips. The apparatus includes a voltage generator, a dispensing head containing the liquid to be dispensed, and an electrode that is in electrical communication with the liquid such that when a voltage pulse is applied to the electrode, the liquid is dispensed from the dispensing head onto a receptacle. The apparatus also can include an electrostatically charged counterplane and can include a guard shield. The invention also provides for means for movement of the dispensing apparatus and the receptacle relative to each other. The invention also provides methods for dispensing fluids onto a receptacle surface, including 96-, 384- and 1536-well plates.



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INTERNATIONAL SEARCH REPORT

International Application No
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A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 B01L3/02 B01J19/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 B01L B01J G01N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	GB 1 433 786 A (MAGYAR TUDOMANYOS AKADEMIA) 28 April 1976 (1976-04-28) figures 1-3 page 1, line 12 -page 1, line 24 page 2, line 14 -page 2, line 47 page 2, line 72 -page 2, line 100 page 2, line 112 -page 3, line 37	1-3,7, 11-13, 34,44, 45,47
Y		4,5, 17-19, 22-25, 31,32, 38,42, 43,45
A		48-54

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[X] Further documents are listed in the continuation of box C.

[X] Patent family members are listed in annex.

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Date of the actual completion of the international search	Date of mailing of the international search report
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Name and mailing address of the ISA	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Runser, C

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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