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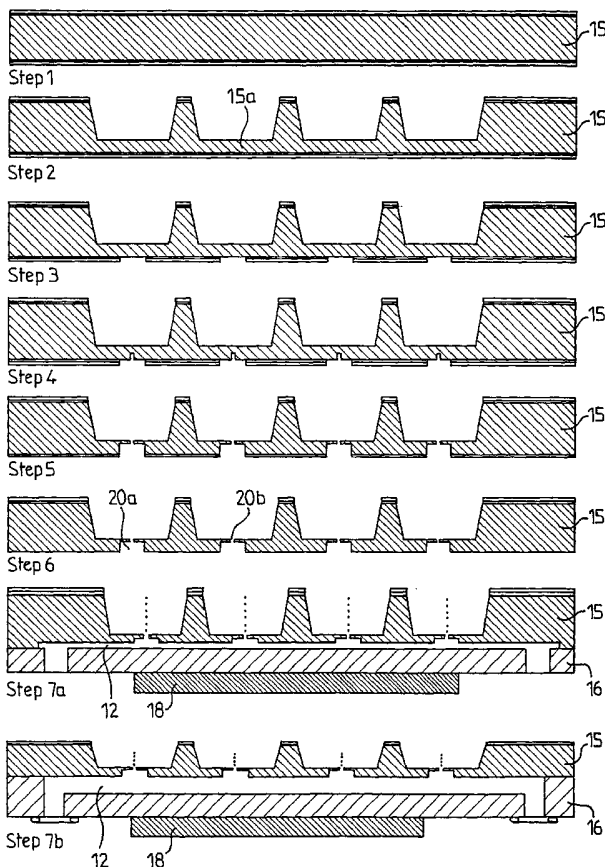
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(54) Title: METHOD OF MANUFACTURING A LIQUID DROPLET SPRAY DEVICE AND SUCH SPRAY DEVICE



(57) Abstract: The invention concerns a liquid droplet spray device for atomising a liquid substance. Its housing consists of at least a first substrate (15), a space (12) within the housing for containing the supplied liquid substance, an outlet means arranged in the first substrate (15) and comprising at least one outlet nozzle (19) and at least one output channel (20), said output channel (20) having straight side-walls, and a vibrating element (18) for vibrating the liquid so as to eject it. According to the present invention, each output channel (20) has a stepped shape having a lower portion (20a) and an upper portion (20b), the lower portion being arranged adjacent the space (12) and being of larger diameter than the upper portion (20b). The outlet nozzle (19) of each output channel is straight and does not show notching effects. The invention also concerns a method of manufacturing such device using a differential etching technique to obtain the stepped shape output channel without notching effects on the outlet nozzle.



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C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 142 607 A (SAWADA KEISHI ET AL) 7 November 2000 (2000-11-07) column 3, line 50 -column 5, line 31; figures 1-4	1, 3
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Y	column 10, line 9 -column 11, line 37; figures	6-9, 11-13
Y	US 5 635 337 A (BARTHA JOHANN ET AL) 3 June 1997 (1997-06-03) column 1, line 55 -column 2, line 51; figures	6-9, 11-13
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Patent family members are listed in annex.

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