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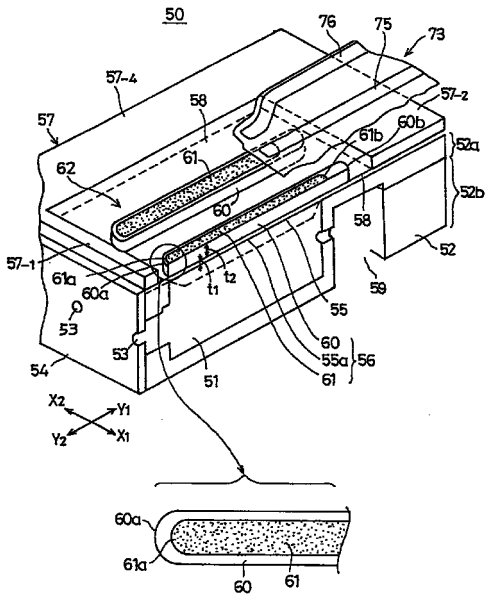
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(54) Ink jet printer head and printer apparatus

(57) A piezo-electric reinforcing member surrounding a plurality of pressure generating units is formed in a thin vibrating chromium film membrane. The reinforcing member is not discrete but continuous with respect to a region of the membrane enclosing the pressure generating units. Within the membrane, thermal stress as well as stress caused by differences in the crystal structure of the piezo-electric member and the chromium film arise. The mechanical strength of the reinforcing member itself restrains the shrinkage of the vibrating membrane caused by the internal stress, thereby preventing cracks from occurring in the vibrating membrane. Likewise, the ends of the pressure generating components as well as the individual electrodes are shaped so as to make it difficult for stress to accumulate thereat, thereby also preventing cracks from occurring in the vibrating membrane.

FIG.4



EP 1 013 429 A3

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EUROPEAN SEARCH REPORT

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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	18 January 2001	Meulemans, J-P

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