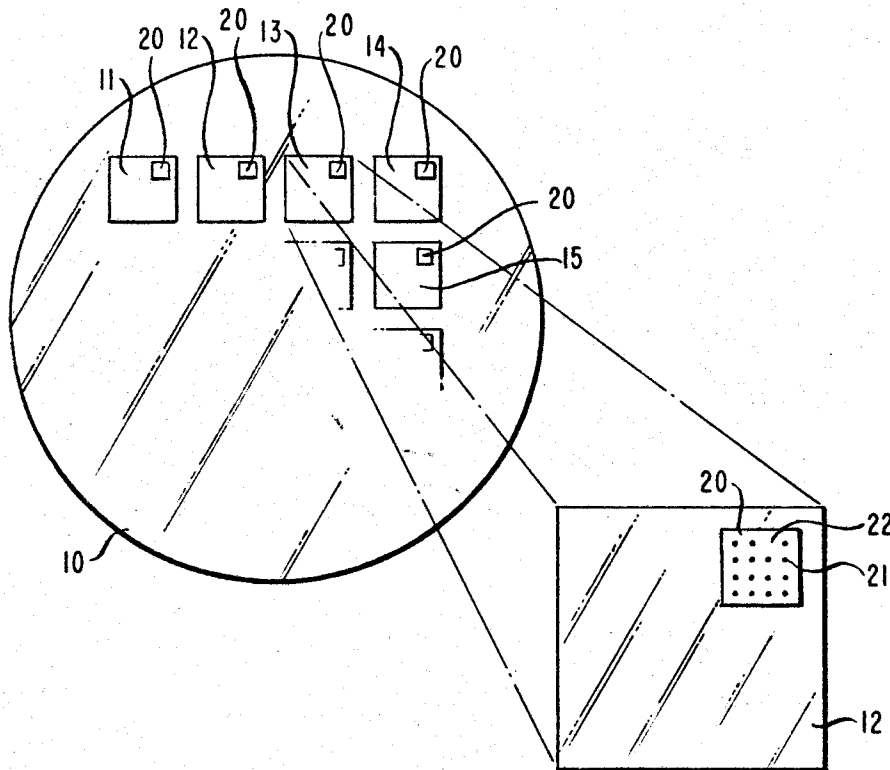


INTEGRATED CIRCUIT CHIP IDENTIFICATION METHOD

S. LURYI, N. C. WITTEWER (Deceased)

AT&T-BL - Murray Hill



For many purposes, especially device development, production and quality control, it is important to know the originating location of a semiconductor chip on a wafer. It is desirable that means for so identifying chips be machine readable as well as visually readable, and that such chip identification require a minimum quantity of data for its specification.

These objectives are achieved by an analog identification scheme, an exemplary embodiment of which is illustrated below. Semiconductor wafer 10 carries a multiplicity of chips, exemplified by chips 11-15. Each chip carries a marking area 20, similarly shown on all chips of the wafer. The originating location of each chip is indicated by means of an analogously located identifying mark in the marking area. This can, for instance, be a mark placed at the appropriate position, or the absence of a mark at the appropriate position in an array of marks. The latter is illustrated in the Figure, where in dot matrix 21 every position corresponds to a chip position on the wafer, and the absence of a dot position 22 identifies the location of chip 12 on the wafer.