

ABSTRACT

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**AUTOSTEREOSCOPIC SCREEN, DEEMED TO BE OF
PHOTOGRAPHIC QUALITY**

The invention relates to a screen (10) for autostereoscopic display, deemed
10 to be of photographic quality, of an autostereoscopic image with $M \times N$ viewpoints,
N being an odd integer and M being an integer selected from 1, 2, 3 and 6, said
screen comprising a panel of pixels (20) arranged by rows and by columns, each
pixel (26) being composed of a plurality of P active sub-pixels of different colors,
and an ordered array of cylindrical lenses (30) inclined with respect to the
15 columns of the screen by an angle equal to $\arctan(1/12)$, said array having a pitch
of $N/2$ pixels in width so as to be able to differentiate the even and odd lenses (30)
of said array by distinct distributions of the active zones (26) and black zones (24)
of the pixels arranged under the lenses, and to decode each of the $M \times N$
viewpoints distributed within N vertical blocks 6 pixels in height from M
20 viewpoints every 12 rows if the sub-pixels of the panel are horizontal, and
distributed within $P \times N$ vertical blocks $6/P$ sub-pixels in height, from M/P
viewpoints every $12/P$ rows if the sub-pixels of the panel are vertical.

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Figure for the abstract: figure 2