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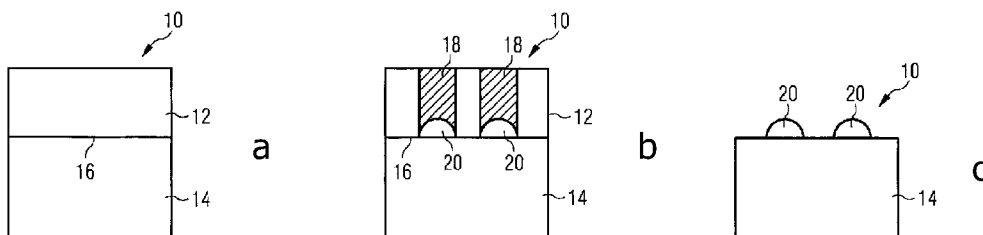
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(54) Title: MASTER SUBSTRATUS AND METHODS FOR MASTERING



(57) Abstract: The present invention relates to a master substrate (10) for creating a high-density relief structure, particularly a master substrate (10) for making a stamper for the mass fabrication of optical discs or a master substrate for creating a stamp for micro contact printing, wherein an organic dye layer (12) is provided for creating the high-density relief structure. The present invention further relates to a method for providing a high density relief structure on a master substrate (10) comprising an organic dye layer (12), the method comprising the following steps: applying dye bleaching laser pulses on regions (30) of the master substrate (10) where pits (32) are to be formed; and removing the bleached regions (30) of the organic dye layer (12) by an etching process. The present invention also relates to a method for providing a high density relief structure on a master substrate (10), the method comprising the following steps: - providing a master substrate (10) comprising at least a polycarbonate layer (14) carrying an organic dye layer (12); forming bumps (20) at the dye/polycarbonate interface (16) by applying laser pulses; and removing the remaining dye layer by an etching process.