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Fig. 1a and 1b: Appearance of an Example of a 1st, 2nd and 3rd level cholesteric LPP/LCP Security Device

Fig. 1a: 'Positive mode' (polarizer +45° to the x-axis)

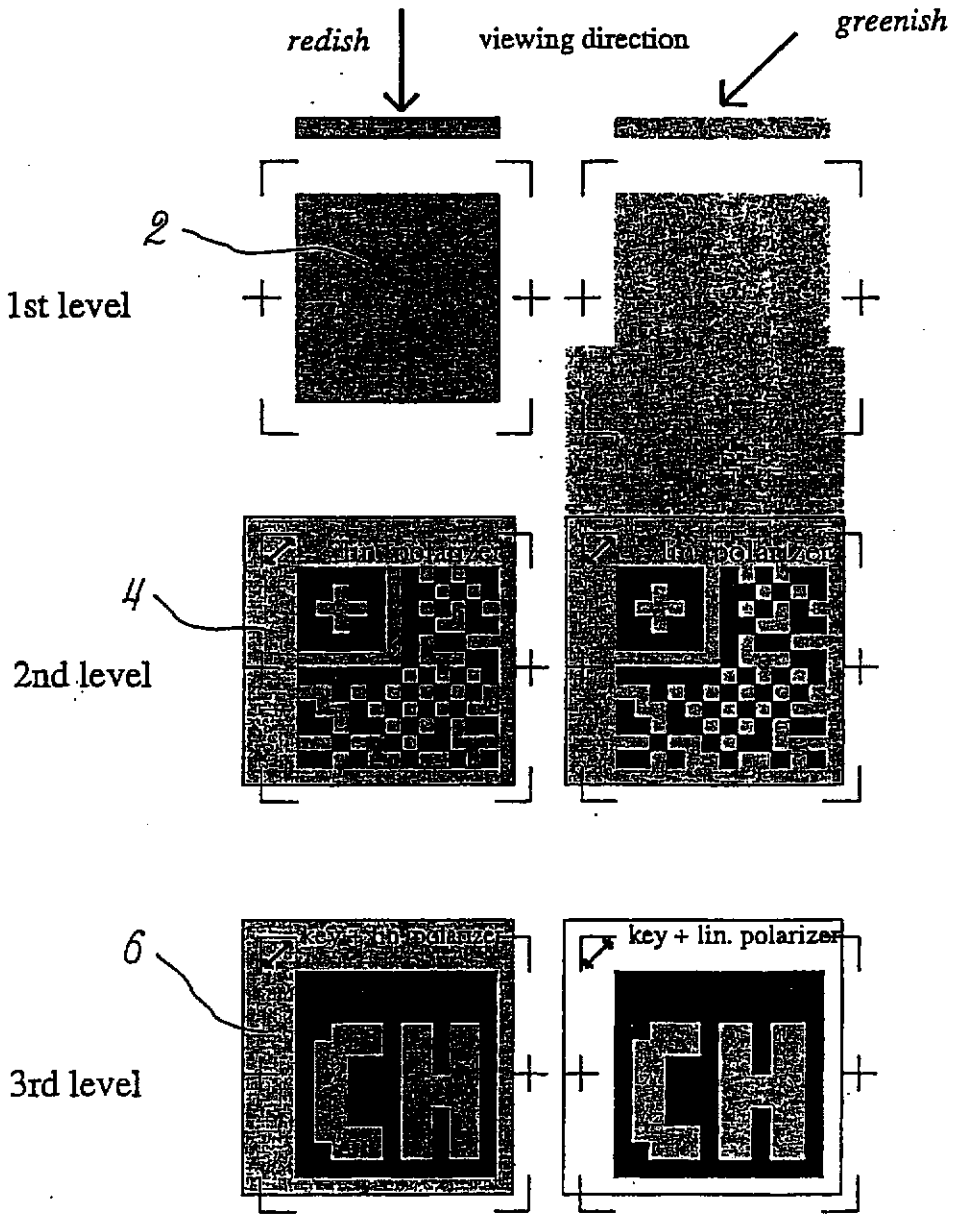

Fig. 1b: 'Negative mode' (polarizer –45° to the x-axis)

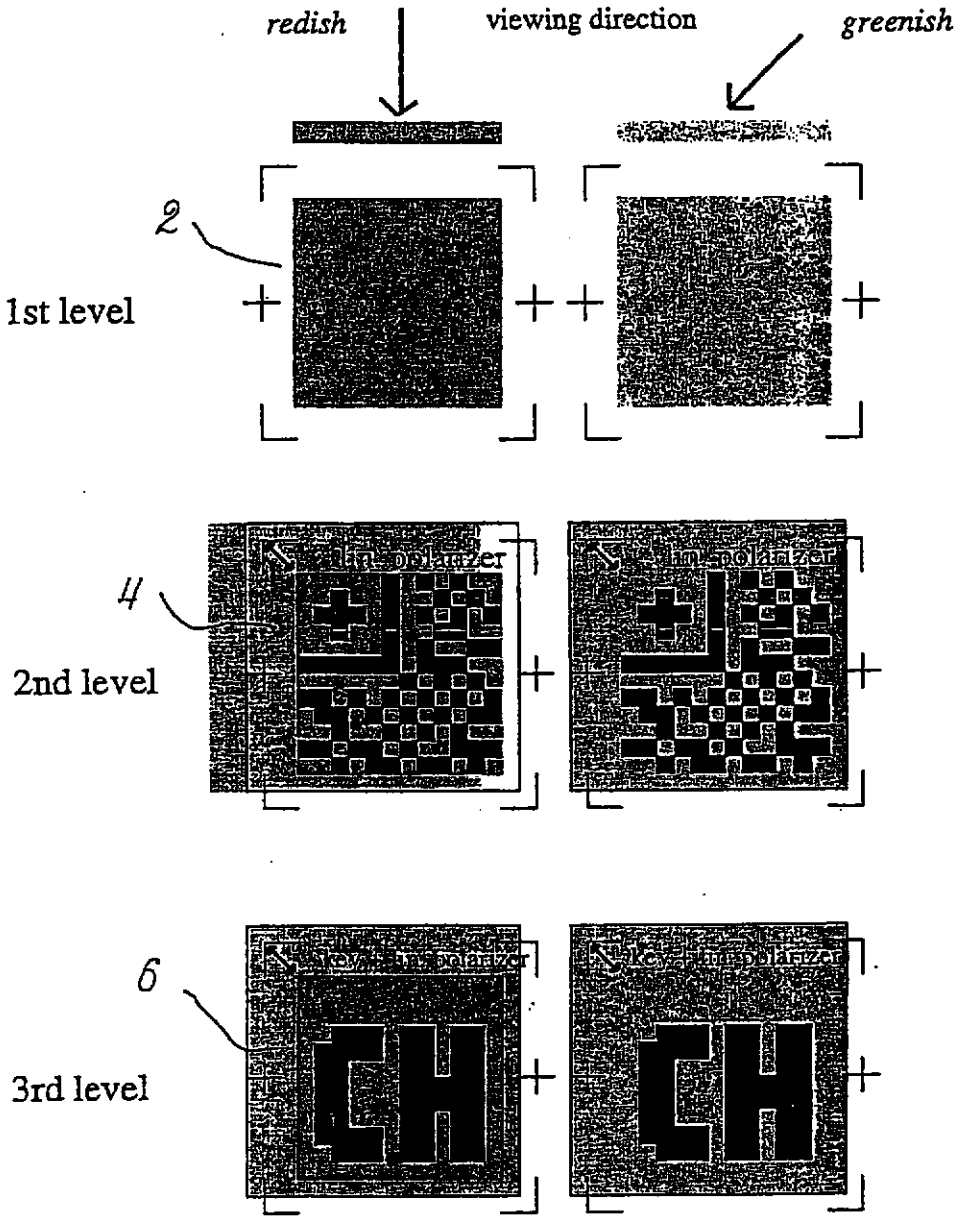

Fig. 2a,b and c: Schematic view of the "Optical device" together with the inspection tools for 1st, 2nd and 3rd level

Fig. 2a: 3rd level inspection mode

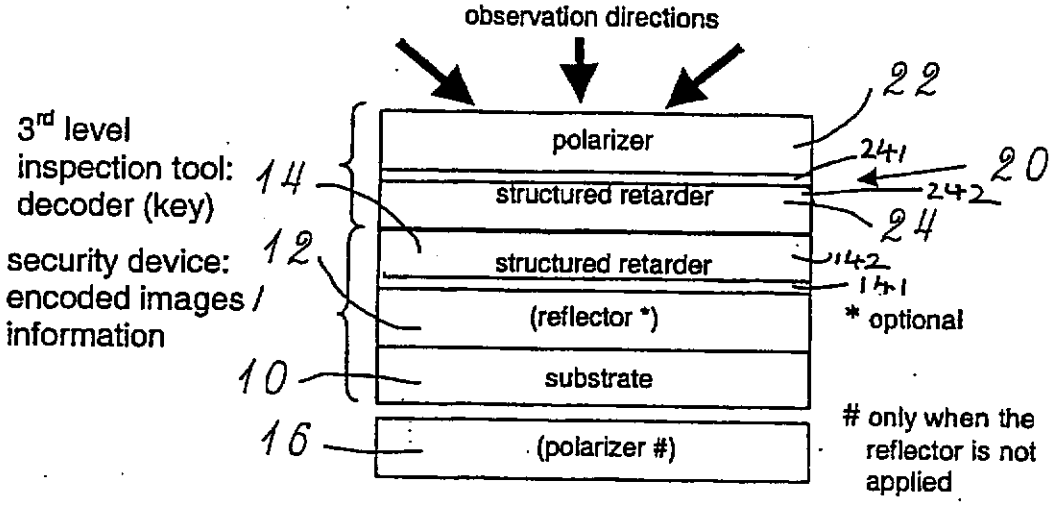

Fig. 2b: 2nd level inspection mode

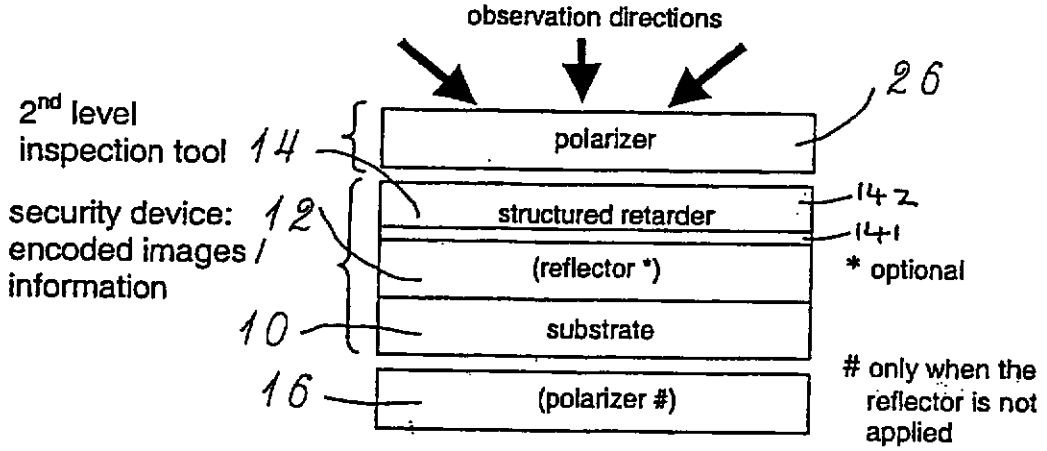

Fig. 2c: 1st level inspection mode by tilting the security device

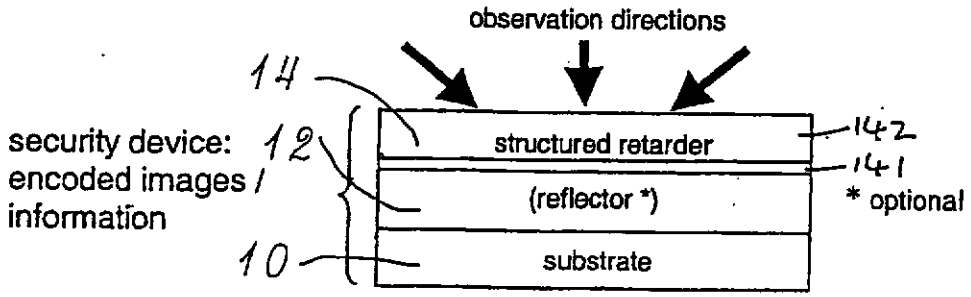

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Fig. 3: Alternative schematic view of the "Optical device" (inverse layer order e.g. for transfer foils or similar substrates); only the security device without inspection tools is depicted

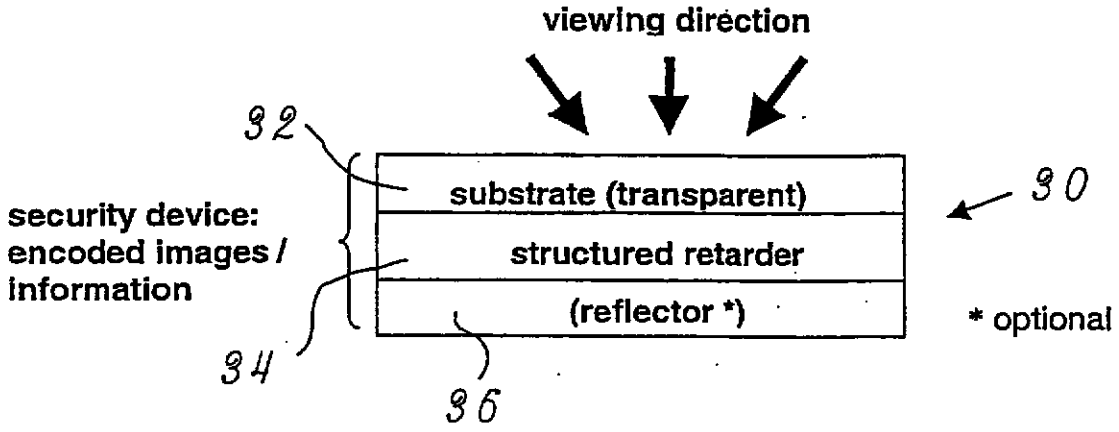
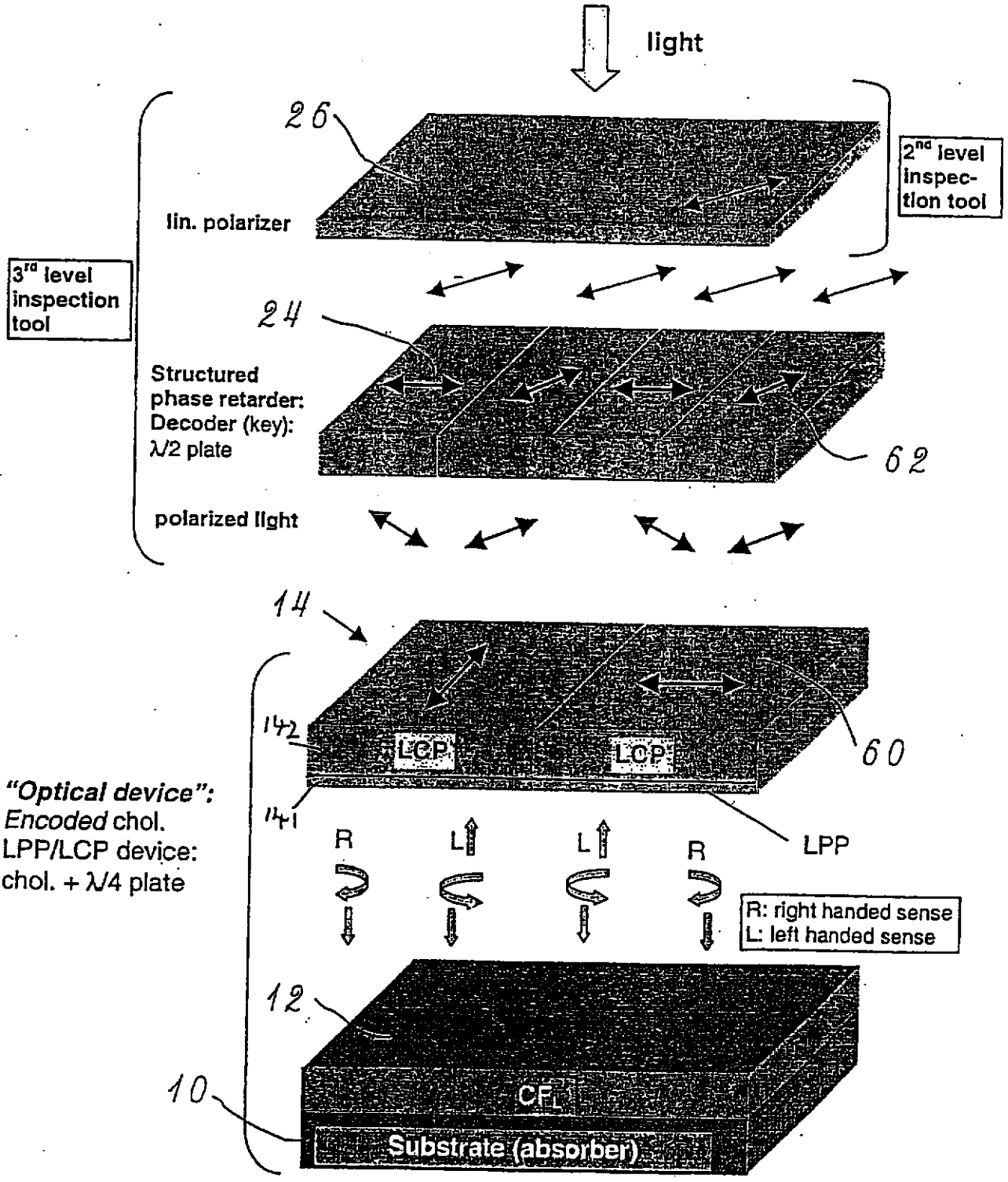


Fig. 4: 3rd level LPP/LCP Security Device: Cholesteric type



"Optical device": *Encoded* chol. LPP/LCP device: chol. + λ/4 plate

Fig. 5: Some typical retarder configuration for the encoded device and decoding device (cholesteric type)

(cholesteric type)

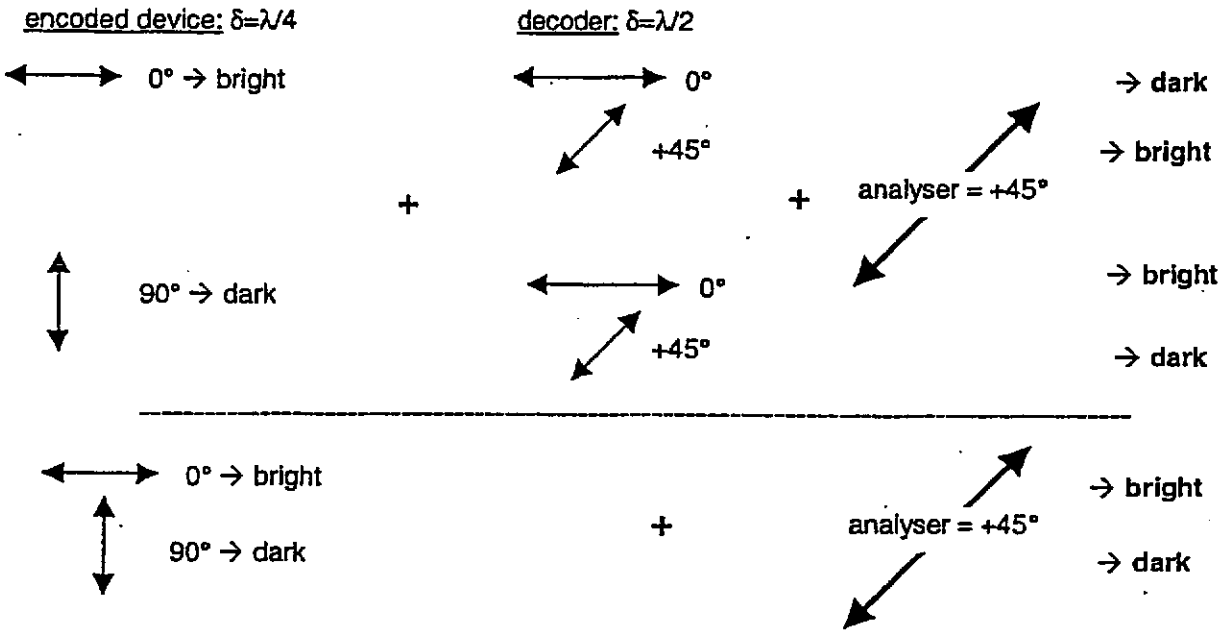


Fig. 6: Schematically representation of the geometry of an encoded LPP/LCP Device and its corresponding decoder (example)

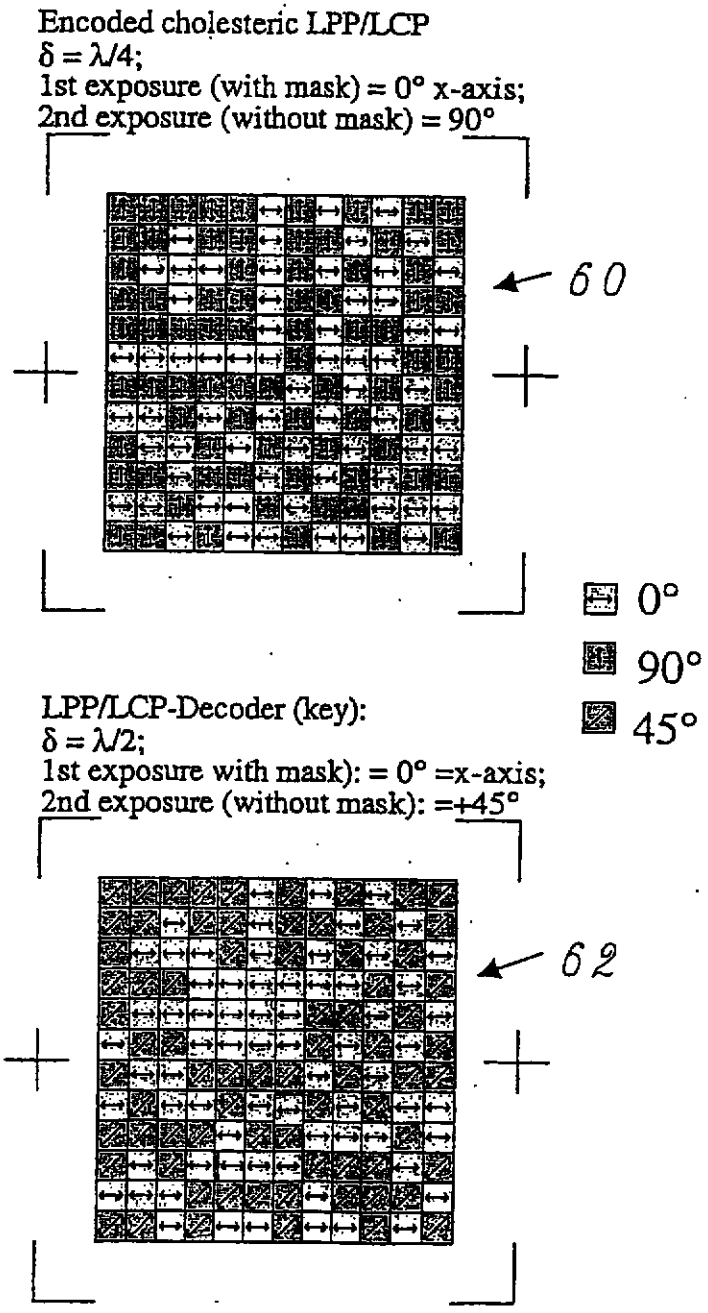
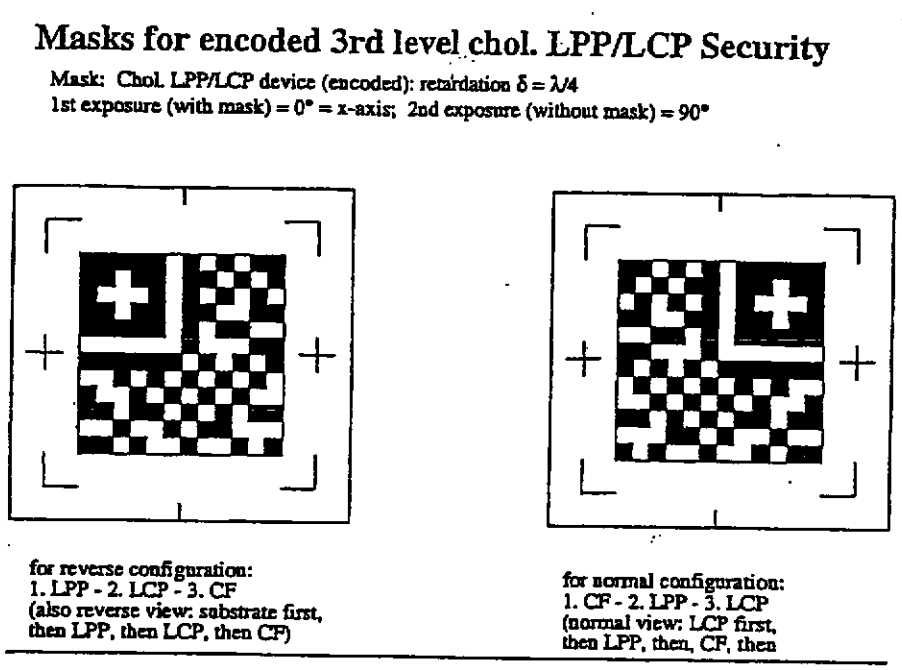



Fig. 7: Masks for the manufacturing of an "Optical device" (example)