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- (71) **Applicant: DISPELIX OY** [FI/FI]; Metsänneidonkuja 10,  
02130 Espoo (FI).
- (72) **Inventor: BLOMSTEDT, Kasimir;** c/o Dispelix Oy, Met-  
sänneidonkuja 10, 02130 Espoo (FI).
- (74) **Agent: LAINE IP OY;** Porkkalankatu 24, 00180 Helsinki  
(FI).
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(54) **Title:** AN OPTICAL WAVEGUIDE ARRANGEMENT WITH IMPROVED CAPACITY

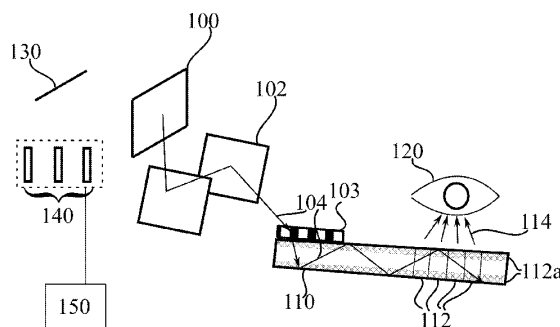


FIGURE 1

(57) **Abstract:** According to an example aspect of the present invention, there is provided an optical waveguide arrangement comprising an in-coupling structure (103) arranged to diffract an incoming light signal having a spectral characteristic in visible spectrum into a first version of the light signal with a first polarization and a second version of the light signal with a second polarization, wherein the first polarization is at least partially orthogonal compared to the second polarization, and the in-coupling structure (103) is further arranged to diffractively couple the first and the second versions of the light signal into an optical waveguide (110) and the optical waveguide (110) arranged to convey the first version of the light signal with the first polarization and the second version of the light signal with the second polarization towards an eye (120), to generate a waveguide-based display.

[Continued on next page]

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