

Title (en)  
COMPACT OPTICAL-FIBRE SAGNAC INTERFEROMETER

Title (de)  
KOMPAKTES FASEROPTISCHES SAGNAC-INTERFEROMETER

Title (fr)  
INTERFÉROMÈTRE DE SAGNAC À FIBRE OPTIQUE COMPACT

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Application  
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Abstract (en)  
[origin: WO2020074834A2] The invention relates to a Sagnac interferometer with a looped or straight optical fibre. According to the invention, the interferometer comprises an integrated hybrid optical path (200) having at least a first, electro-optical, substrate (1) and a second, transparent, substrate (2) with a common interface (20), the first substrate (1) comprising a first optical waveguide (11), a second optical waveguide (12), the first optical waveguide (11) and the second optical waveguide (12) being connected to at least one end (61) of the optical fibre coil (6), and an input-output optical waveguide (10) connected to a light source (4) and to a sensing system (5), the second substrate (2) comprising at least one U-shaped optical waveguide (21) and the integrated hybrid optical path (200) comprising a planar waveguide Y-junction (26) with a common branch (160) and two secondary branches (161, 162).

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