

Title (en)
MULTICHANNEL OPTICAL COUPLER

Title (de)
OPTISCHER MEHRKANALKOPPLER

Title (fr)
COUPLEUR OPTIQUE MULTICANAL

Publication
EP 4045954 A4 20231025 (EN)

Application
EP 20876134 A 20201015

Priority
• US 201962923383 P 20191018
• US 201916670224 A 20191031
• US 2020055778 W 20201015

Abstract (en)
[origin: WO2021076752A1] The optical fiber coupler array can be capable of providing a low-loss, high-coupling coefficient interface with high accuracy and easy alignment between a plurality of optical fibers (or other optical devices) with a first channel-to-channel spacing, and an optical device having a plurality of closely-spaced waveguide interfaces with a second channel-to-channel spacing, where each end of the optical fiber coupler array can be configurable to have different channel-to-channel spacing, each matched to a corresponding one of the first and second channel-to-channel spacing. Advantageously, the refractive indices and sizes of both inner and outer core, and/or other characteristics of vanishing core waveguides in the optical coupler array can be configured to reduce the back reflection for light propagating from the plurality of the optical fibers at the coupler first end to the optical device at the coupler second end, and/or vice versa.

IPC 8 full level
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CPC (source: EP)
G02B 6/024 (2013.01); **G02B 6/03633** (2013.01); **G02B 6/255** (2013.01); **G02B 6/2804** (2013.01); **G02B 6/2856** (2013.01); **G02B 6/305** (2013.01); **G02B 6/02042** (2013.01)

Citation (search report)
• [IA] US 2019049657 A1 20190214 - KOPP VICTOR IL'ICH [US], et al
• [IA] US 2019025501 A1 20190124 - KOPP VICTOR IL'ICH [US]
• [IA] US 2019243069 A1 20190808 - KOPP VICTOR IL'ICH [US]
• See also references of WO 2021076752A1

Designated contracting state (EPC)
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