

Title (en)
CO-PRIME OPTICAL TRANSCEIVER ARRAY

Title (de)
ANORDNUNG AUS OPTISCHEM CO-PRIME-SENDEEMPFÄNGER

Title (fr)
RÉSEAU D'ÉMETTEURS-RÉCEPTEURS OPTIQUES CO-PRIMES

Publication
EP 3593408 A1 20200115 (EN)

Application
EP 18764449 A 20180309

Priority
• US 201762469106 P 20170309
• US 2018021882 W 20180309

Abstract (en)
[origin: CN110383580A] A co-prime transceiver attains higher fill factor, improved side-lobe rejection, and higher lateral resolution per given number of pixels. The co-prime transceiver includes in part, a transmitter array having a multitude of transmitting elements and a receiver array having a multitude of receiving elements. The distance between each pair of adjacent transmitting elements is a first integer multiple of the whole or fraction of the wavelength of the optical. The distance between each pair of adjacent receiving elements is a second integer multiple of the whole or fraction of the wavelength of the optical signal. The first and second integers are co-prime numbers with respect to one another. The transceiver is fully realizable in a standard planar photonics platform in which the spacing between the elements provides sufficient room for optical routing to inner elements.

IPC 8 full level
H01Q 3/26 (2006.01); **H01Q 21/22** (2006.01)

CPC (source: EP US)
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Designated extension state (EPC)
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