

Title (en)  
RECONFIGURABLE OPTICAL BACKPLANE

Title (de)  
REKONFIGURIERBARE OPTISCHE RÜCKWANDPLATINE

Title (fr)  
FOND DE PANIER OPTIQUE RECONFIGURABLE

Publication  
**EP 3900238 A1 20211027 (FR)**

Application  
**EP 19829613 A 20191220**

Priority  
• FR 1873949 A 20181221  
• EP 2019086792 W 20191220

Abstract (en)  
[origin: WO2020128040A1] The invention relates to an optical backplane (50) for an optical communication network architecture (20) distributing data to equipment (70), including: - an optical demultiplexer (51) coupled at input to an optical fiber (40) for carrying at least two multiplexed channels of different wavelengths, a channel ( $\lambda_3$ ) for controlling and managing the optical communication network and at least one channel ( $\lambda_1$ ,  $\lambda_2$ ) dedicated to a service, and at output to at least two output ports configured to deliver, each, the control and management channel and the at least one channel ( $\lambda_1$ ,  $\lambda_2$ ) dedicated to a service, respectively; - an optical wavelength-division multiplexer (57); - a first coupler (52) configured to receive the channel ( $\lambda_3$ ) and to transmit one portion of said channel to an interface box (60) coupled to an item of equipment (70), and another portion of said channel to the optical wavelength-division multiplexer (57); - a routing device (53) for each output port of the optical demultiplexer (51), said device being configured to receive a channel ( $\lambda_1$ ,  $\lambda_2$ ), and either to transmit said channel ( $\lambda_1$ ,  $\lambda_2$ ) to the optical multiplexer when it is in a first position, or to transmit one portion of said channel ( $\lambda_1$ ,  $\lambda_2$ ) to the interface box coupled to an item of equipment and another portion of said channel ( $\lambda_1$ ,  $\lambda_2$ ) to the optical multiplexer when it is in a second position, said optical wavelength-division multiplexer being configured to combine the received channel ( $\lambda_3$ ) and the received at least one channel ( $\lambda_1$ ,  $\lambda_2$ ) and to wavelength-division multiplex them onto the optical fiber (40).

IPC 8 full level  
**H04J 14/02** (2006.01); **H04Q 1/02** (2006.01)

CPC (source: EP US)  
**H04J 14/0212** (2013.01 - US); **H04J 14/0267** (2013.01 - US); **H04J 14/0278** (2013.01 - US); **H04J 14/028** (2013.01 - EP);  
**H04L 12/40189** (2013.01 - EP)

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**WO 2020128040 A1 20200625**; EP 3900238 A1 20211027; FR 3091118 A1 20200626; FR 3091118 B1 20220218; US 11329752 B2 20220510;  
US 2022029728 A1 20220127

DOCDB simple family (application)  
**EP 2019086792 W 20191220**; EP 19829613 A 20191220; FR 1873949 A 20181221; US 201917416860 A 20191220