

Title (en)  
OPTICAL ADD-DROP MULTIPLEXER

Title (de)  
OPTISCHER EIN/AUSFÜGE-MULTIPLEXER

Title (fr)  
MULTIPLEXEUR OPTIQUE A INSERTION-EXTRACTION

Publication  
**EP 1044529 A1 20001018 (EN)**

Application  
**EP 98960669 A 19981203**

Priority  
• US 9825622 W 19981203  
• US 6717797 P 19971210

Abstract (en)  
[origin: WO9930454A1] An all optical add-drop multiplexer (ADM) includes nonlinear optical loop mirrors (NOLMs) (302, 304) having signal input (I1), gating input (G1), through output (T1) and drop output (D1) ports. A stream of soliton pulses coupled to the gate input (G1), synchronized with soliton signal pulses coupled to the signal input (I1), directs the signal pulses to the drop output (D1) or to the thro output (T1), depending upon the presence or absceence of solitons in the gate signal. Operations such as logic INVERSION and logic AND are effected by the NOLMs (302, 304) and signals may be added through a combination of operations equivalent to a logic "OR". Such combinations are employed to produce one or more drops and one or more adds in an add-drop multiplexer.

IPC 1-7  
**H04J 14/08**

IPC 8 full level  
**G02F 1/35** (2006.01); **H04B 10/29** (2013.01); **H04B 10/556** (2013.01); **H04J 14/08** (2006.01)

CPC (source: EP)  
**H04J 14/083** (2013.01)

Citation (search report)  
See references of WO 9930454A1

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