

Title (en)  
TELECOMMUNICATIONS SWITCH

Title (de)  
FERNMELDEVERMITTLUNGSSYSTEM

Title (fr)  
COMMUTATEUR DE TELECOMMUNICATION

Publication  
**EP 0968591 A1 20000105 (EN)**

Application  
**EP 98909672 A 19980318**

Priority  
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Abstract (en)  
[origin: WO9842105A1] A self-routing switch such as a Banyan switch has a controller which recognises incoming routing requests which would give rise to blocking in the switch and makes an optimum selection of queued requests which can be handled without blocking. The controller is implemented by means of an optical neural network having a light source array (14) to illuminate a photodetector array (26) through a mask (15), there being a light source array element (20) and a photodetector element (27) for each possible path through the switch. The assignment of paths to array locations is such that, for the path corresponding to any light source array element, the photodetector array element positions corresponding to the paths blocked thereby form a pattern which is a shifted version of the pattern formed by the photodetector array elements corresponding to the paths blocked by a path corresponding to any other light source array element, whereby a single mask may be employed.

IPC 1-7  
**H04L 12/56**; G06F 15/80; G06E 3/00

IPC 8 full level  
**G06E 3/00** (2006.01); **G06F 15/80** (2006.01); **H04L 12/56** (2006.01); **H04L 12/937** (2013.01); **H04L 12/931** (2013.01); **H04L 12/933** (2013.01); **H04L 12/935** (2013.01); **H04L 49/111** (2022.01)

CPC (source: EP)  
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