Title (en)

OPTICAL METHOD FOR QUANTUM COMPUTING

Title (de)

OPTISCHES VERFAHREN FÜR QUANTUMRECHNER

Title (fr)

PROCEDE OPTIQUE DE CALCUL QUANTIQUE

Publication

EP 1183778 A2 20020306 (EN)

Application

EP 99918827 A 19990426

Priority

• US 9908982 W 19990426
• US 8298398 P 19980424

Abstract (en)

[origin: WO9956392A2] An optical method for quantum computing that makes use of nonlocal effects to construct the quantum gates themselves. A nonlocal interaction in which pairs of atoms interchange two photons produces a large nonlinear phase shift. These nonlinear phase shifts are used to construct quantum logic gates, such as a Controlled-NOT.

IPC 1-7

H03K 3/00

IPC 8 full level

G02F 3/00 (2006.01); **G06E 3/00** (2006.01); **G06N 99/00** (2010.01)

CPC (source: EP KR)

B82Y 10/00 (2013.01 - EP KR); **G06N 10/00** (2018.12 - EP)

Citation (search report)

See references of WO 9956392A2

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

WO 9956392 A2 19991104; **WO 9956392 A3 20011213**; **WO 9956392 A8 20000629**; CA 2326187 A1 19991104; CN 1163788 C 20040825; CN 1419660 A 20030521; EP 1183778 A2 20020306; JP 2002531861 A 20020924; KR 20010085237 A 20010907

DOCDB simple family (application)

US 9908982 W 19990426; CA 2326187 A 19990426; CN 99805118 A 19990426; EP 99918827 A 19990426; JP 2000546454 A 19990426; KR 20007011561 A 20001018