

Title (en)

SELF-ADAPTING NEURAL-FUZZY NETWORK FOR REAL-TIME PROCESS CONTROL

Title (de)

SELBSTADAPTIERENDES NEURO-FUZZY-NETZ FÜR ECHTZEITPROZESSSTEUERUNG

Title (fr)

RESEAU NEURONAL-FLOU AUTOADAPTATIF POUR COMMANDE DE PROCESSUS INDUSTRIEL EN TEMPS REEL

Publication

EP 1012680 A2 20000628 (EN)

Application

EP 98943614 A 19980914

Priority

- CA 9800895 W 19980914
- GB 9719527 A 19970912

Abstract (en)

[origin: WO9914640A2] There is provided a control system for laser processing of a material, the system comprises a sensor for receiving electromagnetic emissions from a weld zone; a fuzzy logic subsystem for processing said sensor outputs directly to produce a weld quality output signal; and a neural network subsystem using input data frequency from said sensor outputs and said weld quality signal to develop a weld parameter control signal, whereby the neural network is capable of detecting extraordinary events in the incoming data stream while the fuzzy logic controller is capable of detecting trends in the incoming data stream.

IPC 1-7

G05B 13/02

IPC 8 full level

B23K 26/03 (2006.01); **G05B 13/02** (2006.01)

CPC (source: EP)

B23K 26/0342 (2015.10); **B23K 26/0344** (2015.10); **B23K 31/006** (2013.01); **G05B 13/0285** (2013.01)

Citation (search report)

See references of WO 9914640A2

Designated contracting state (EPC)

AT DE ES FR GB IT PT SE

DOCDB simple family (publication)

WO 9914640 A2 19990325; **WO 9914640 A3 19990603**; AU 9150298 A 19990405; BR 9812209 A 20000718; CA 2301692 A1 19990325; EP 1012680 A2 20000628; GB 9719527 D0 19971119

DOCDB simple family (application)

CA 9800895 W 19980914; AU 9150298 A 19980914; BR 9812209 A 19980914; CA 2301692 A 19980914; EP 98943614 A 19980914; GB 9719527 A 19970912