

Title (en)  
PRINTING CONTROL DEVICE WITH TIMING DISC

Publication  
**EP 0055325 B1 19840613 (DE)**

Application  
**EP 81107090 A 19810909**

Priority  
US 22122380 A 19801230

Abstract (en)  
[origin: US4343012A] Circuit for generating from a pair of pulse trains produced in phase quadrature both an indication of the direction of print head motion and the production of timing signals from the leading and trailing edges of the pulses of only one of the two pulse trains. A pair of transducers is used to sense a timing disk rotating in synchronism with the movement of a carrier for a plurality of print elements moving along a print line which transducers are generating respective output pulse trains which are in phase quadrature relation to the other. The circuit provides timing signals for controlling the energization of the print elements at print positions along the print line and retains the same polarity for printing in either direction.

IPC 1-7  
**B41J 3/04**

IPC 8 full level  
**B41J 19/18** (2006.01); **B41J 2/23** (2006.01); **B41J 19/20** (2006.01)

CPC (source: EP US)  
**B41J 2/23** (2013.01 - EP US); **B41J 19/202** (2013.01 - EP US)

Citation (examination)  
• US 4195938 A 19800401 - VELAZQUEZ JUAN F [US]  
• US 4225251 A 19800930 - KLIMEK NORBERT M, et al

Cited by  
GB2132561A; DE3918071A1

Designated contracting state (EPC)  
DE FR GB IT

DOCDB simple family (publication)  
**EP 0055325 A1 19820707**; **EP 0055325 B1 19840613**; DE 3164188 D1 19840719; JP H0143637 B2 19890921; JP S57128579 A 19820810; US 4343012 A 19820803

DOCDB simple family (application)  
**EP 81107090 A 19810909**; DE 3164188 T 19810909; JP 14642381 A 19810918; US 22122380 A 19801230