

Title (en)

METHOD OF DETERMINING A CUTTING POSITION FOR PRINTING MACHINES

Publication

EP 0328783 B1 19920408 (DE)

Application

EP 88121745 A 19881228

Priority

CH 62288 A 19880219

Abstract (en)

[origin: EP0328783A1] On a web offset or web letterpress printing machine, to ensure ganging of the paper webs (P1 - P4) to be folded and cut into newspapers (16), the positions of the main and subsidiary registers (5, 7) are controlled by positioning motors (M1 - M4) in dependence on positioning signals (SM1 - SM4). Over each funnel inlet guide roll (10), four photo-cells (11) are arranged beside each other with uniform spacing and detect brightness signals (HAI - HD4) at a sampling frequency of 20 kHz from the printed surface of the paper webs. These brightness signals are subjected to Fourier analysis in a microprocessor. The fundamental vibration is evaluated, the vibration of greatest amplitude being selected from the four fundamental vibrations of each paper web. The phase position signal associated with the selected fundamental vibration is used to calculate one of the positioning signals (SM1 - SM4). In this way, the cutting position of the paper webs (P1 - P4) can be determined without registration marks being applied to them. <IMAGE>

IPC 1-7

B41F 13/02; B65H 23/188

IPC 8 full level

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Cited by

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