

Title (en)

Apparatus and method for counting sheets

Title (de)

Vorrichtung und Verfahren zum Zählen von Blättern

Title (fr)

Appareil et méthode de comptage de feuilles

Publication

EP 0743616 A3 19980114 (EN)

Application

EP 96420158 A 19960506

Priority

US 44114995 A 19950515

Abstract (en)

[origin: EP0743616A2] An apparatus and method for counting sheets of thin media is provided by illuminating with an LED array 24 the edge 5 of a plurality of sheets 8. A linear CCD array camera 20 receives the reflected light from the sheets 8, and generates a signal waveform responsive to variations in the reflected light corresponding to the sheets. A digitizer then converts the signal into a digital signal waveform for storage in a video buffer 36. The stored signal waveform is thereafter processed along one dimension of said edge using a digital signal processor 34 for locating the positions of the sheets in the waveform, and then counting the sheets. Preferably, the linear CCD array camera 20 provides a one-dimensional image of the edge 5, however a two-dimensional CCD array may be used with additional signal processing to translate its two-dimensional signal into a one-dimensional signal. The apparatus further can locate in the signal waveform rigid portions called stiffener boards 9 which border the plurality of sheets 8 or lie at intervals between the sheets. The processing in this apparatus is automatically adaptive to sheets of different media type, edge conditions, and the presence or absence of stiffener boards 9. The apparatus can be used for counting sheets comprising a pack 10, or the rotational convolutions 74 of media on a roll 70. <IMAGE>

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IPC 8 full level

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CPC (source: EP)

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Citation (search report)

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