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(54) **Method and apparatus for currency discrimination and counting**

(57) An improved method and apparatus for discriminating between currency bills of different denominations uses an optical sensing and correlation technique based on the sensing of bill reflectance characteristics obtained by illuminating and scanning a bill. A series of detected reflectance signals are obtained by sampling and processing the reflected light as the currency bill is moved across a light strip. The sample data is subjected to processing, whereby the reflectance data represents a characteristic pattern that is unique for a given bill denomination and incorporates sufficient distinguishing features between characteristic patterns for discriminating between different currency denominations.

A plurality of master characteristic patterns are generated and stored using original bills for each denomination of currency to be detected. The characteristic pattern for a scanned currency bill is compared to each of said stored master patterns to determine the degree of correlation therebetween, and thereby to identify the denomination of said currency bill.

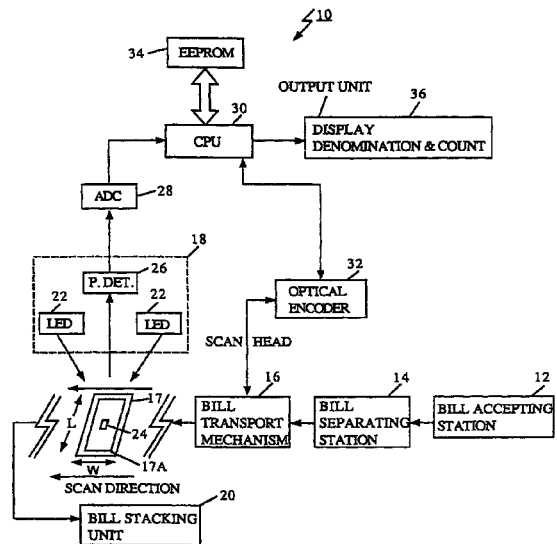


FIG. 1



European Patent Office

EUROPEAN SEARCH REPORT

Application Number
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The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 4 May 1999	Examiner Taccoen, J-F
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

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ANNEX TO THE EUROPEAN SEARCH REPORT
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