

- The Optical Character Recognition (OCR) function has recently moved from implementation as firmware in a document reader to software in a PC or workstation. At the same time, flexibility and capabilities have been expanded to give reliable recognition of many different character fonts and sizes - 99.5% accuracy is claimed by at least one vendor. ⁷

- Relational data bases have evolved over many years and can readily provide the ability to link data in virtually unlimited ways - thus allowing functions that require a great deal of flexibility in handling different data fields such as those involved in a passport application. Recent developments allow inclusion of graphic elements (images) as a supported data type in some relational data bases (e.g. Informix). In fact, in a survey of 17 PC based data base management packages, 7 have explicit support for graphics in industry standard formats. ⁸

6.6 Other Technologies.

One technology with potential to significantly change the system of physical passport books is the "smart card" or document with an integrated circuit ("chip") imbedded in it. These cards are now in common use in some European countries as credit/debit type cards. The chip can store information about the cardholder which can be read by a machine. Additional information can be written into the chip by the same machine.

It is conceivable to think of a passport with similar technology. The chip could contain biometric data about the holder which would have to match the image on the data page. Positive confirmation of biometric data could be accomplished by matching fingerprint or signature data from the chip with the cardholder's own fingerprint or image. It is reported that a system is currently being piloted in Holland which allows frequent business travellers to use a card for automatic

⁷ *DOS Resource Guide*, IDG Communications, issue No 2, 1991

⁸ *ibid*