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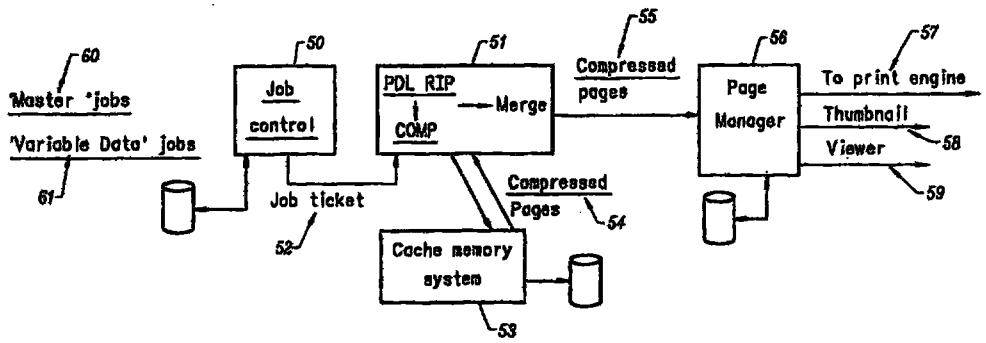
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(54) Title: METHOD AND APPARATUS FOR VARIABLE DATA PRINTING



(57) Abstract

A technique is described for adding variable data to a print job, while requiring a minimum amount of storage. Key to the invention is the use of a data compression algorithm during RIPing. During a first stage of operation, a master document is RIPed into a compressed format and saved in a cache, such as RAM or disk storage. It is important to note that RIPing and data compression are performed simultaneously. This minimizes the amount of processing power necessary to RIP and compress a large document, while significantly reducing the amount of storage space required to save the RIPed master document. The variable data document is RIPed and compressed during a second stage of operation using the same algorithm as applied to the master document. Uniquely, the variable data document is RIPed directly onto the master document in compressed format. During the second phase of operation, the master document to be personalized is retrieved from memory and stored in a frame buffer. The variable data document is RIPed in compressed format directly into the frame buffer. A compressed file that results may be decompressed and forwarded to the print engine.