

Title (en)

Plate inverter for plate management system and method of operation

Title (de)

Plattenumkehrvorrichtung für Plattenverwaltungssystem und Verfahren zum Betrieb

Title (fr)

Dispositif permettant de retourner des plaques pour un système de gestion de plaques et méthode d'opération

Publication

**EP 1637323 A1 20060322 (EN)**

Application

**EP 04104451 A 20040915**

Priority

EP 04104451 A 20040915

Abstract (en)

A substrate manager for a substrate exposure machine is used, in one example, as a platesetter. As such, it comprises a substrate storage system, containing one or more stacks of substrates, such as plates in one implementation. A substrate picker is provided for picking substrates from the stack of substrates. The substrates are then handed to a transfer system that conveys the substrates to an imaging engine. According to the invention, a substrate inverter system (300) is also provided. This system inverts the substrates from being imaging or emulsion side down to emulsion side up in the present implementation. This allows plates, for example, which are stored emulsion side down in cassettes to be flipped to an emulsion side up orientation, and then transferred, using the substrate transfer system to the imaging engine. This flipping process has two advantages. First, the plates can be emulsion side up during the transfer. This prevents any damage to the sensitive plate emulsions. Moreover, the plates, now in an emulsion side up configuration are in the right orientation for being installed on the outside of a drum on an external drum imaging system, as is common in many platesetters. Also, the plates are picked from the non emulsion side. Thus the system is less sensitive to emulsion formulation changes. A slip sheet capture mechanism is also provided to transfer slip sheets separating the plates to a storage location. The plate inverter system (300) comprises an arcuate transfer path (310) over which the plates are conveyed to effect the inversion. The inverter has a lead arm (332) and a lagging arm (312).

IPC 8 full level

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CPC (source: EP US)

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