

Title (en)
Process and apparatus for the deacidification of books

Title (de)
Verfahren und Vorrichtung zur Entsäuerung von Büchern

Title (fr)
Procédé et dispositif de déacidification de livres

Publication
EP 0918105 A2 19990526 (DE)

Application
EP 98114273 A 19980730

Priority
DE 19751673 A 19971121

Abstract (en)
The system to reduce the acid contained in books and documents, through their paper compositions, has a hermetically sealed chamber (21) to take the books. The chamber has an inner vacuum. Powder, to build up an alkaline reserve in the books, is eddied out of a supply container and carried to the book pages in an air stream. The powder is carried in a turbulent air stream. Two opposing air streams, at 180 degrees to each other, are directed at the books in the chamber (21). The books, in the chamber (21), are horizontal with their spines downwards, and are opened by about 90 degrees. The books are initially cleaned by a preheated air stream. The opened books are moved to and fro in the air stream(s). The eddied powder in the supply chambers is drawn into the chamber (21) by the vacuum. The books are heated by the air stream(s) and, after dusting with the powder, are treated with steam with heating to prevent steam condensation. The books are cleaned of any residual powder by an air stream. The books are initially cleaned to remove any dust or loose paper particles, and then treated by the application of powder to the pages. The treated pages are conditioned by steam, followed by cleaning to remove any surplus powder. The powder is preferably MgO. An Independent claim is included for an assembly, where the books are arranged in a cassette trolley, which is moved to and fro within the chamber (21). Preferred Features: The book cassettes have side walls to enclose an inner zone of 90 degrees, and form an angle of 45 degrees to the upper side of the trolley. The side walls are adjustable for the book widths, and have openings to secure the book covers. The chamber (21) has a closure to give a hermetic seal against the ambient atmosphere.

Abstract (de)
Verfahren und Vorrichtung zur Entsäuerung von Büchern oder dergleichen, wobei die Bücher (27) in einer nach außen hermetisch abgeschlossenen Behandlungskammer (21) angeordnet und mit Vakuum beaufschlagt werden, wobei das Pulver aus einem Vorrat heraus aufgewirbelt, in die Kammer eingesaugt und mit einem Umluftstrom auf die Buchseiten aufgebracht wird, wobei die Buchseiten durch Hin- und Herbewegung aufgeblättert werden. <IMAGE>

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D21H 25/18; B41M 7/00

IPC 8 full level
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CPC (source: EP)
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