Title: APPARATUS & METHOD FOR HIGH SPEED DOCUMENT COLLATION FOR INSERT INTO NEWSPAPER AND OTHER PRINTED MEDIA

Abstract: An apparatus and method for processing newspaper-type insert media into a newspaper-type jacket using bottom-up collating presenting an inverted shingled stream onto a conveyor means. A feed system picks inserts off of the top of a stack by a series of grippers. Each insert is layered into an inverted shingled stream using bottom-up collation, collecting downstream inserts and placing them below the upstream insert in the proper order. The inverted stream of the system takes advantage of gravity and aerodynamics to reduce flyaway inserts. The system uses a loop of continuous pocket means to receive collected and collated inserts into one side from a stream, while collecting the jacket part for which the insert is intended, processing each individual jacket in a continuous stream to prepare the jacket to be placed properly for acceptance of the collated inserts in a continuous stream.
A CLASSIFICATION OF SUBJECT MATTER
IPC(8) - B07C 5/00 (2009.01)
USPC - 209/707

According to International Patent Classification (IPC) or to both national classification and IPC

B FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
USPC - 209/707

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
USPC - 209/12 1, 509, 707 (keyword limited - see below)

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
PU/WEST/PGPB, USPT, EPAB, JPAB, Google Scholar

Search Terms Used newspaper, jacket, insert, supplement, collating, top-feeding, top-loading, shingles, inverted, reversed, g;pper,
clamp, weight, gravity, stream

C DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
<thead>
<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No</th>
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</thead>
<tbody>
<tr>
<td>Y</td>
<td>US 5,415,385 (A (Newsome et al.), 16 May 1995 (16 05 1995), entire document, especially col 2 In 58 to col 3 in 32, col 5 In 11 b col 7 In 63, Fig 1</td>
<td>1-10</td>
</tr>
<tr>
<td>Y</td>
<td>US 5,269,504 (A (Backma 2)), 14 December 1993 (14 12 1993), entire document, especially col 3 In 16 to col 4 In 59</td>
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<tr>
<td>A</td>
<td>US 6,170,638 B1 (Davenport), 09 January 2001 (09 01 2001), entire document</td>
<td>1-10</td>
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<tr>
<td>A</td>
<td>US 4,743,005 A (Reist), 10 May 1988 (10 05 1988), entire document</td>
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D Further documents are listed in the continuation of Box C

** Special categories of cited documents
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**&** document member of the same patent family

Date of the actual completion of the international search
03 June 2009 (03 06 2009)

Date of mailing of the international search report
17 JUN 2009

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