10-19-2004 (Rev. 10/02) OMB No. 0651-0027 (exp. 6/30/2)	T U.S. DEPARTMENT OF COMMERCE U.S. Patent and Trademark Office
Tab settings ⇔ ⇔ ▼ 102862152	Please record the attached original documents or copy thereof.
1. Name of conveying party(ies):	
Harrel Dean Ashby	2. Name and address of receiving party(ies) The Dean Ashby Family Trus Name: dated December 11, 2003
3.29.04	
	Internal Address: <u>H. Dean Ashby and</u> Estalita M. Ashby Co-Trustees,
Additional name(s) of conveying party(ies) attached? Yes X No	or successors in trust
3. Nature of conveyance:	
X Assignment	Street Address: 11913 Rosemeade Court
Security Agree. Change of Mame	
Other	
	City: <u>Oklahoma_CitS</u> tate: <u>OK_Zip:73162</u>
Execution Date: 03/04/2004	Additional name(s) & address(cs) atlached? Type K No
4. Application number(s) or patent number(s):	
	cation, the execution date of the application is: $\underline{N/A}$
A. Patent Application No.(s) <u>968533</u>	B. Patent No.(s)
314734, 454819	
5. Name and address of party to whom correspondence	ached? Yes X No 6. Total number of applications and patents involved: 3
concerning document should be mailed: The Dean Ashby Family Trust	
Name: dated December 11, 2003	7. Total fee (37 CFR 3.41)\$
Internal Address: <u>Estalita M. Ashby</u>	
Co-Trustee	Authorized to be charged to deposit account
	8. Deposit account number:
Street Address: 11913 Rosemeade Court	10
City: <u>Oklahoma</u> State: <u>OK</u> Zip: <u>73162</u>	
CityDO NOT USE	THIS SPACE
9. Signature.	
Harrel Dean Ashby	Vall 3-04-04
Name of Person Signing	CSignature Date
Total number of pages including cover MGETACHE 00000159 0968533 Mail documents to be recorded with	er sheet, attachments, and documents:

United	States	Patent:	5,975,830

1382553	Mar., 1988	SU	414/797.
8402575	Jul., 1984	WO	414/797.

Primary Examiner: Krizek; Janice L. Assistant Examiner: Hess; Douglas Attorney, Agent or Firm: Dunlap, Codding & Rogers, P.C.

Claims

What is claimed is:

1. An apparatus for discharging a disk from a stack of aligned disks, each disk having a pair of parallel, planar surfaces and an outer peripheral edge, the apparatus comprising:

a pair of feed gate subassemblies supported in a spaced apart, diametrically opposing relationship so as to define a disk receiving opening therebetween, the feed gate subassemblies adapted to cooperatively support the stack of disks in the disk receiving opening and compressively engage at least a portion of the outer peripheral edge of the disk positioned at the bottom of the stack of disks to permit discharge of the bottom disk from the stack of disks, each feed gate subassembly comprising:

a cylinder having a piston slidably disposed therein so as to be adapted for reciprocating movement relative to the cylinder;

a piston rod having one end connected to the piston so that the piston rod is reciprocatingly movable relative to the cylinder, the piston rod extending in a radially inward direction toward the disk receiving opening;

a support flange rigidly connected to the cylinder, the support flange extendible into the disk receiving opening for supporting the stack of disks;

a clamp block connected to a distal end of the piston rod and having an inwardly extending lip, the lip having an edge engaging surface and a stack support surface, the clamp block positioned relative to the support flange so that the edge engaging surface of the clamp plate is abuttingly engagable with a portion of the outer peripheral edge of the disk positioned at the bottom of the stack of disks and supported by the support flange upon movement of the clamp block to a disk engaging position; and

means for resiliently biasing the cylinder and the support flange in a radial inward direction such that the support flange extends into the disk receiving opening a distance sufficient to support the stack of disks when the edge engaging surface of the clamp block is in a non-engaging relationship relative to the outer peripheral edge of the bottom disk and for permitting the cylinder and the support flange to slide in a radial outward direction such that the support flange is moved to a non-supporting position relative to the stack of disks upon movement of the clamp block to the disk engaging position wherein the edge engaging surface of the clamp block is caused to abuttingly engage a portion of the outer peripheral edge of the bottom disk so as to compressibly deform the bottom disk and thereby cause the bottom disk to be discharged from the stack while the stack support surface of the clamp block is maintained in a position beneath at least a portion of the adjacently disposed disk to support the remainder of the stack of disks.

2. The apparatus of claim 1 wherein the edge engaging surface of the clamp block of each of the feed gate subassemblies is configured to conform to the contour of the outer peripheral edge of the disks.

http://164.195.100.11/netacgi/nph-Parser?Sect1=PTO2&Sect2=HITOFF&p=1&u=/netahtm... 2/21/2001 PATENT REEL: 015884 FRAME: 0648

Assignment of Patent

WHEREAS, I, Harrel Dean Ashby, of Oklahoma City, Oklahoma, did obtain Letters Patent of the United States for an improvement in *See Exhibit "A" hereto*; and Whereas I am now the sole owner of said Patent; and

WHEREAS, The Dean Ashby Family Trust dated December 11, 2003, H. Dean Ashby and Estalita M. Ashby, Co-Trustees, or successors in trust, TID No. 443-40-6518, whose address is 11913 Rosemeade Court, Oklahoma City, Oklahoma 73162, is desirous of acquiring the entire interest in the same;

NOW, THEREFORE, in consideration of the sum of one dollar (\$1.00), the receipt of which is hereby acknowledged, and other good and valuable consideration, I, Harrel Dean Ashby, by these presents do sell, assign and transfer unto the said Dean Ashby Family Trust dated December 1¹ 2003, the entire right, title and interest in and to the said Letters Patent aforesaid; the same to be held and enjoyed by the said Dean Ashby Family Trust dated December 11, 2003, for its own use and for its legal representatives and assigns, to the full end of the term for which said Letters Patent are granted, as fully and entirely as the same would have been held by me had this assignment and sale not been made.

Executed this 4^{4} day of March, 2004, at Oklahoma City, Oklahoma.

Ventoren a

ACKNOWLEDGMENT

State of Oklahoma)) ss;

County of Oklahoma)

Before me personally appeared said Harrel Dean Ashby and acknowledged the foregoing instrument to be his free act and deed this $\frac{4^{22}}{2}$ day of March, 2004.

S DONNITA D. BARKLEY E Oklahoma County Notary Public in and for A State of Oklahoma Commission # 03012243 Expires 09/29/07

Jonnita D. Bar

PATENT REEL: 015884 FRAME: 0649

RECORDED: 03/29/2004