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(54) Title: A SHREDDING MACHINE

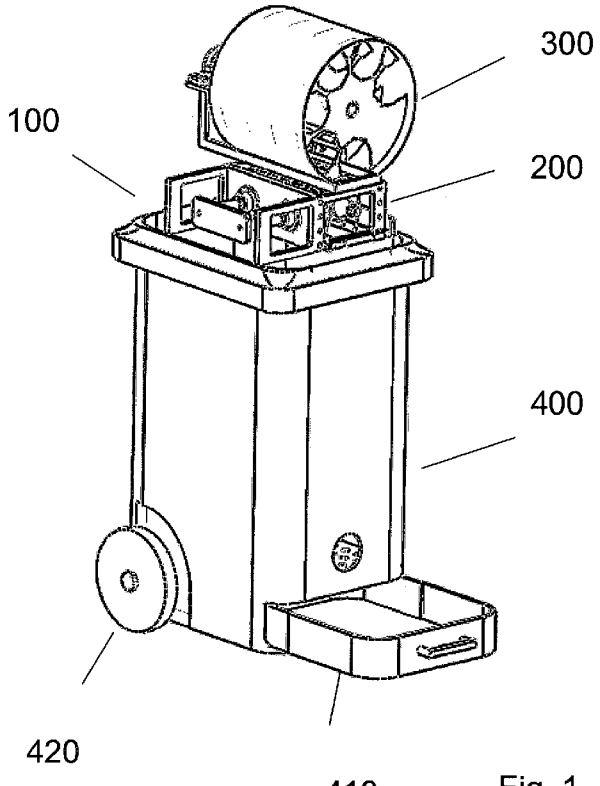


Fig. 1

(57) Abstract: The present invention discloses a machine for shredding plastic container. The machine comprises a pressing device, a fixed plate having slits arranged in matrix pattern, where said plate is positioned at one end within the housing and said slits face the interior space of the housing, a movable plate having plurality of blades connected to at least one arm, wherein said plate is arranged to move along a central axis within the housing and said blades edges facing the sharp edges of said fixed plate where the blades configuration correspond to slits matrix pattern. When operating the machine the containers are placed in-between said movable plate and said fixed plate, such that when the movable plates moves along the central axis of the housing toward the fixed plate, the blades crash and cut/shear the container into flakes of predefined size suitable for recycling.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
IPC(8) - B02C 1/00, 19/00, 21/00, 23/00 (2011.01)
USPC - 241/283
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: 241/283

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
USPC: 241/24.1, 24.28, 26, 33, 34, 198.1, 262, 264, 300.1 (text search - see terms below)

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
PubWEST(USPT,PGPB,EPAB,JPAB); Google
Search Terms: plastic, pet, cut, smash, bottle, recycle, stationary, plate, movable, blade, slit, slot, shred, angle, predetermined, predefined, size, flakes, drawer, liquid, perforations, strain

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 7,546,965 B1 (PARKIN) 16 June 2009 (16.06.2009), entire document especially the Abstract; Figs 1-4; col 3, lns 2-5; col 3, lns 18-40; col 3, lns 56-67	1-20
Y	US 4,967,626 A (DOSTER et al.) 06 November 1990 (06.11.1990), entire document especially Figs 1-6, col 1, ln 55-col 2, ln 14	1-20
Y	US 5,558,284 A (BAUMUNG et al.) 24 September 1996 (24.09.1996), entire document especially Figs 1, 7, 7A; col 2, lns 49-61; col 9, lns 34-37; col 10, lns 1-4	2, 8, 11
Y	US 4,324,325 A (DEWOOLFSON) 13 April 1982 (13.04.1982), entire document especially Figs 2, 6	7-8
Y	US 5,441,160 A (DEWOOLFSON et al) 15 August 1995 (15.08.1995), entire document especially col 6, lns 13-37; col 6, lns 38-62; col 8, lns 48-57	10, 15, 17-20
Y	US 3,299,802 A (BLACK) 24 January 1967 (24.01.1967), entire document especially Fig 1, 3; col 1, lns 11-38	12
Y	US 5,172,630 A (THOMPSON) 22 December 1992 (22.12.1992), entire document especially col 7, lns 7-14	16
Y	US 2,660,313 A (JAMES et al.) 24 November 1953 (24.11.1953), entire document especially Figs 1-2; col 3, lns 8-32	11

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Date of the actual completion of the international search	Date of mailing of the international search report
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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,947,016 A (REPAC et al.) 07 September 1999 (07.09.1999), entire document especially Fig 2	1-20
Y	US 5,255,859 A (PEACOCK et al.) 26 October 1993 (26.10.1993), entire document especially Fig 2; col 3, lns 28-31; col 5, lns 31-40	11
Y	US 5,213,031 A (HEBBERT) 25 May 1993 (25.05.1993), entire document especially Fig 1; col 4, lns 16-33	11
Y	US 4,600,159 A (AKESSON) 15 July 1986 (15.07.1986), entire document especially col 3, lns 16-20	5
Y	US 2006/0260449 A1 (OKUYA) 23 November 2006 (23.11.2006), entire document especially Figs 2, 6, 8	1-20
Y	US 5,642,661 A (TU) 01 July 1997 (01.07.1997), entire document especially Figs 1-6	1-20
Y	US 5,435,445 A (DELLINGER et al.) 25 July 1995 (25.07.1995), entire document especially col 5, lns 1-13	15, 19
A	US 2,467,278 A (THOMPSON et al.) 12 April 1949 (12.04.1949), entire document especially Fig 1	1-20
A	US 5,267,496 A (ROACH et al.) 07 December 1993 (07.12.1993), entire document especially Figs 1-4	1-20
A	US 5,106,026 A (BARON) 21 April 1992 (21.04.1992), entire document especially Figs 1-2	1-20
A	US 4,073,661 A (BUZGA et al.) 14 February 1978 (14.02.1978), entire document especially col 7, lns 22-25	1-20
A	US 5,560,552 A (POWELL et al.) 01 October 1996 (01.10.1996), entire document especially col 1, lns 34-39	1-20
A	US 2008/0223758 A1 (SCHEERES) 18 September 2008 (18.09.2008), entire document especially Figs 1, 14; para [0126]	7-8