

**Search history**

Search 1: FT=((machine or device or apparatus) and sisal and (fiber\* or fibre\*)) and IC=(D01B1/10) (Results 63)  
Search 2: 1 and chain\* (Results 27)  
Search 3: 2 and (screw or worm) (Results 9)  
Search 4: 3 and hopper (Results 1)  
Search 5: 1 and bagasse (Results 2)  
Search 6: 5 and extruder (Results 0)  
Search 7: 5 and (screw or worm) (Results 1)  
Search 8: FT=((machine or device or apparatus) and (fiber\* or fibre\*)) and IC=(D01B1/10) (Results 510)  
Search 9: 8 and (screw or worm) (Results 73)  
Search 10: 9 and juice (Results 10)

**Title:** Accessing leaf and/or stem parts of plants

**Abstract:** The invention relates to the separation and of components from vegetable raw materials. The invention provides a method for separating components from vegetable material which has at least leaf and/or stem parts, characterized in that the material is at least partly **fiberized** and subsequently is separated into a **fiber** fraction and a **juice** stream, such that the **fiber** fraction principally has relatively firm tissues such as epidermis, sclerenchyma and vascular bundles, and the **juice** stream principally contains soft tissues such as parenchyma and cytosol. In preferred embodiment, the invention provides a method for separating a **juice** stream which has in particular chloroplasts.

**Classifications:**

**International (IPC 8-9):** A23J1/00 A23J3/14 A23K1/14 A23L1/212 A23L1/30 A23L1/305 A23N1/00 C07K1/34 C08B1/00 D01B1/10 D01B1/42 (Advanced/Invention);

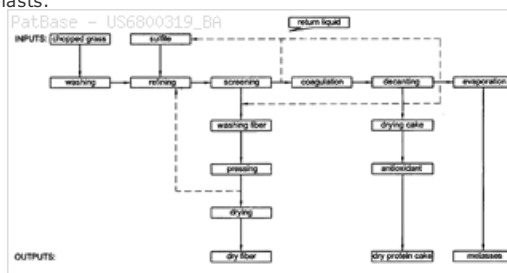
A23J1/00 A23K1/14 A23L1/212 A23L1/30 A23L1/305 A23N1/00 C07K1/00 C08B1/00 D01B1/00 (Core/Invention)

**International (IPC 1-7):** A23J3/14 D01B1/10 D01B1/42

**CPC:** D01B1/42

**European:** D01B1/42

**US:** 162/24 162/91 162/97 162/98 426/656 99/537



**Family:**

| Publication number | Publication date | Application number | Application date |
|--------------------|------------------|--------------------|------------------|
| AT235585 E         | 20030415         | AT19990963700T     | 19991224         |
| AU200020072 A1     | 20000724         | AU20000020072      | 19991224         |
| AU200020072 A5     | 20000724         | AU20000020072      | 19991224         |
| AU758967 B2        | 20030403         | AU20000020072      | 19991224         |
| BRPI9916780 A      | 20011204         | BR1999PI16780      | 19991224         |
| CA2358981 AA       | 20010705         | CA19992358981      | 19991224         |
| CA2358981 C        | 20071106         | CA19992358981      | 19991224         |
| CN100489164 C      | 20090520         | CN19998015470      | 19991224         |
| CN1333845 A        | 20020130         | CN19998015470      | 19991224         |
| CZ20012359 A3      | 20020213         | CZ20010002359      | 19991224         |
| CZ303419 B6        | 20120905         | CZ20010002359      | 19991224         |
| DE69906378 D1      | 20030430         | DE19996006378T     | 19991224         |
| DE69906378 D1      | 20030430         | DE19996006378      | 19991224         |
| DE69906378 T2      | 20040212         | DE19996006378T     | 19991224         |
| DK1141450 T3       | 20031201         | DK19990963700T     | 19991224         |
| EP1141450 A1       | 20011010         | EP19990963700      | 19991224         |
| EP1141450 B1       | 20030326         | EP19990963700      | 19991224         |
| ES2196904 T3       | 20031216         | ES19990963700T     | 19991224         |
| ID30083 A          | 20011101         | ID20010001669      | 19991224         |
| NL1010975 C2       | 20000707         | NL19991010975      | 19990106         |
| NZ512507 A         | 20030131         | NZ19990512507      | 19991224         |
| PL348778 A1        | 20020617         | PL19990348778      | 19991224         |
| RU2001121729 A     | 20030620         | RU20010121729      | 19991224         |
| RU2213169 C2       | 20030927         | RU20010121729      | 19991224         |
| SI1141450 T1       | 20030831         | SI19990030300T     | 19991224         |
| UA69433 C2         | 20011015         | UA20010085562      | 19991224         |
| UA69433 C2         | 20011015         | UA20010805562      | 19991224         |
| US6800319 BA       | 20041005         | US20010869409      | 20010831         |
| WO0040787 A1       | 20000713         | WO1999NL00804      | 19991224         |

**Priority:**

NL19991010975 19990106 EP19990963700 19991224 WO1999NL00804 19991224

**Probable Assignee:** COOPERATIE AVEBE UA

**Assignee(s):** (std): AVEBE COOP VERKOOP PRO ; COOPERATIE VERKOOP EN PRODUC ; COOPERATIE VERKOOP EN BR PR ; COOPERATIE VERKOOP EN PRODUCTIEVERENIGING VAN ; COOPERATIE AVEBE U A ; HULST ANNE COENRAAD ; KETELAARS JAN JOSEF MARIA HUBE ; SANDERS JOHAN PIETER MARINUS ; KOOPERATIE VERKOP EHN PRODUK ; RDAPPELMEL EHN DERIVATEN AVEBE ; COOPERATIE VERKOOP EN PRODUCT ; COOPERATIE VERKOOP EN PRODUCTIEVEREGING VAN AARD ; COOPERATIE VERKOOP EN PRODUCTIEVERENIGING VAN A

**Assignee(s):** COOPERATIE VERKOOP EN PRODUCTIEVERENIGING VAN AR ; COOPERATIE VERKOOP EN PRODUCTIEVERENIGING VAN AARDAPPELMEE L ; COOPERATIE VERKOOP EN PRODUCTIEVERENIGING VAN AARDAPPELMEE EN DERIVATEN AVEBE BA ; COOPERATIE VERKOOP EN PRODUCTIEVERENIGING VAN AARDAPPELMEE EN DERIVATEN AVEBE B A ; COOPERATIE VERKOOP EN PRODUCTIEVERENIGING VAN AARDAPPELMEE EN DERIVA TEN ; COOPERATIE VERKOOP EN PRODUCTIEVEREGING VAN AARD EN DERIV AVEBE B A ; COOPERATIE VERKOOP EN PRODUCTIEVERENIGING VAN AARDAPPELMEE EN DERIVATEN AVEBE B ; KOOPERATIE VERKOP - EHN PRODUKTIVERENIGING VAN AARDAPPELMEL EHN DERIVATEN AVEBE B.A. ; COOPERATIE VERKOOP EN PRODUCTIEVERENIGING VAN AARDAPPELMEL ; COOPERATIE VERKOOP EN PRODUCTIEVERENIGING VAN AA ; COOPERATIE VERKOOP EN PRODUCTIEVERENIGING ; KOOPERATIE VERKOP EHN PRODUKTIVERENIGING VAN A ; COOPERATIE AVEBE UA ; KETELAARS JAN JOSEF MARIA HUBERT ; COOPERATIE VERKOOP EN PRODUCTIEVERENIGING VAN AARDAPPELMEL EN DERIVATEN AVEBE B A ; COOPERATIE VERKOOP EN PRODUCTIEVERENIGING VAN AARDAPPELMEL EN DERIVA TEN AVEBE B A ; COOPERATIE VERKOOP EN PRODUCTIEVERENIGING VAN AARDAPPELMEL EN DERIVATEN AVEBE B A ; COOPERATIE VERKOOP EN PRODUCTIEVERENIGING VAN AARDAPPELMEL EN DERIVATEN AVEBE B A VEENDAM ; COOPERATIE VERKOOP EN BR PRODUCTIEVERENIGING VAN AARDAPPELMEL EN BR DERIVATEN AVEBE B A ; COOPERATIE Verkoop en Productievereniging van Aardappelmeel ; COOPERATIE AVEBE UA ; COOPERATIE VERKOOP EN PRODUCTIEVERENIGING VAN AARDAPPELMEL EN DERIVATEN AVEBE BA ; COOPERATIE VERKOOP EN PRODUCTIEVERENIGING VAN AARDAPPELMEL EN DERIVATEN AVEBE BA ; COOPERATIE VERKOOP EN PRODUCTIEVERENIGING VAN A ; COOPERATIE VERKOOP EN BR PRODUCTIEVERENIGING VA ; COOPERATIE VERKOOP EN

PRODUCTIEVERENIGING VAN AARDAPPELMEEL EN DERIVATEN AVEBE B A ; COOEPERATIE AVEBE U A ; CO 247 PERATIEVE VERKOOP EN PRODUCTIEVERENIGING V ; CO 247 PERATIEVE VERKOOP EN PRODUCTIEVERENIGING VAN AARDAPPELMEEL EN DERIVATEN AVEBE B A ; CO and #247;PERATIEVE VERKOOP EN

**Inventor(s):** (std): KETELAARS JAN JOSEF HUBERT ; KETELAARS JAN JOSEF MARIA HUBE ; KETELAARS JAN JOSEF MARIA HUBERT ; KETELAARS JAN JOSEPH MARIA HUBERT ; KETELAARS JOSEF ; SANDERS JOHAN PIETER MARINUS ; SANDERS JOHANPIETER MARINUS ; SANDERS PIETER ; SANDERS JOKHAN PITER MARINUS ; SANDERS JOHAN PIETER M ; KHJULST ANNE KUNRAD ; KETELARS JAN JOSEF MARIJA KHJU ; KETELAARS JAN JOSEF M H ; HULST ANNE COENRAD ; SANDERS JOHAN PIETER MARIUS ; JOHAN PIETER MARINUS SANDERS ; JAN JOSEF HUBERT KETELAARS ; ANNE COENRAD HULST ; KETELAARS JAN JOSEPH MARIA HUB ; ANNE COENRAAD HULST ; HULST ANNE COENRAAD ; HULST COENRAAD ; JAN JOSEF MARIA HUBERT KETELAARS

**Inventor(s):** JOHANPIETER MARINUS SANDERS ; KETELARS JAN JOSEF MARIJA KHJUBERT

**Agent(s):** FREEHILLS PATENT AND TRADE MARK ATTORNEYS; FREEHILLS PATENT ATTORNEYS; FPA PATENT ATTORNEYS PTY LTD; BORDEN LADNER GERVAIS LLP

**Designated states:** AL AM AT AU AZ BA BB BE BF BG BJ BR BY CA CF CG CH CI CM CN CR CU CY CZ DE DK DM EE ES FI FR GA GB GD GE GH GM GN GR GW HR HU ID IE IL IN IS IT JP KE KG KP KR KZ LC LI LK LR LS LT LU LV MA MC MD MG MK ML MN MR MW MX NE NL NO NZ PL PT RO RU SD SE SG SI SK SL SN SZ TD TG TJ TM TR TT TZ UA UG US UZ VN YU ZW

**Title:** BANANA **FIBER** COMPOSITE MATERIAL

**Abstract:** A system and method for producing bio composite materials by mixing pelletized plant **fiber** dust and virgin or recycled plastic. The system may comprise a reducer, a press, a dryer, a pelletizer, and a mixer. The reducer separates the **fibers** of the plant material and the press removes liquid from the separated **fibers**. The dryer further reduces the moisture content of the pressed **fibers** and generates dust which is extracted by sifting, screening, or another suitable method. The pelletizer compresses and/or treats the **fiber** dust with solutions, adhesives, or other processes that cause the **fiber** dust to adhere together. The **fiber** dust pellets are then mixed with virgin or recycled plastic to produce a bio composite material.

**Classifications:**

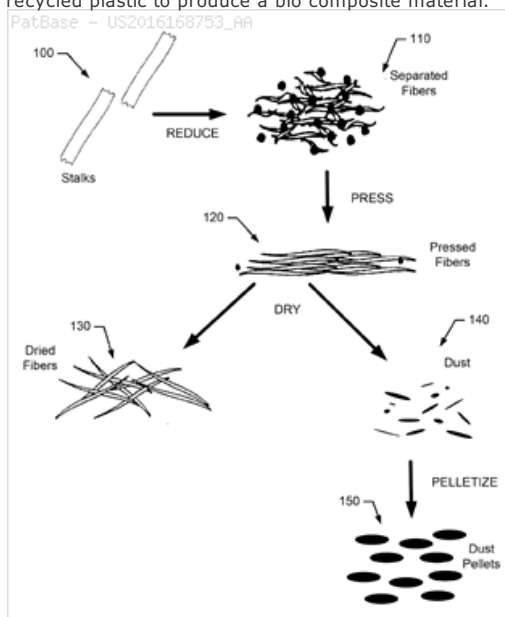
**International (IPC 8-9):** B29B15/08 B29B7/90 B29B9/08 C08K7/02 D01B1/10 D01B1/22 D01B1/48 D04H1/46 (Advanced/Invention);

B29B9/14 (Advanced/Non-invention)

**CPC:** D01B1/22 B29B15/08 C08K7/02 D01B1/48 B29B7/905

B29B9/14 D01B1/10

**US:** 100/90 106/162.1



**Family:**

| Publication number | Publication date | Application number | Application date |
|--------------------|------------------|--------------------|------------------|
| US2016168753 AA    | 20160616         | US20140907338      | 20140723         |
| US10072357 BB      | 20180911         | US20140907338      | 20140723         |
| WO15013409 A1      | 20150129         | WO2014US47822      | 20140723         |

**Priority:**

US20130858305P 20130725      US20140907338 20140723      WO2014US47822 20140723

**Probable Assignee:** GEOPHIA LLC

**Assignee(s):** (std): GEOPHIA LLC

**Inventor(s):** (std): GORMAN WILLIAM W ; GORMAN WILLIAM WINSLOW ; HONDRULIS DIMITRIOS GEORGE ; HONDRULIS DIMITRIOS G

**Agent(s):** NELSON MULLINS RILEY AND SCARBOROUGH LLP; THORSON CHAD L ET AL

**Designated states:** AE AG AL AM AO AT AU AZ BA BB BE BF BG BH BJ BN BR BW BY BZ CA CF CG CH CI CL CM CN CO CR CU CY CZ DE DK DM DO DZ EC EE EG ES FI FR GA GB GD GE GH GM GN GQ GR GT GW HN HR HU ID IE IL IN IR IS IT JP KE KG KM KN KP KR KZ LA LC LK LR LS LT LU LV LY MA MC MD ME MG MK ML MN MR MT MW MX MY MZ NA NE NG NI NL NO NZ OM PA PE PG PH PL PT QA RO RS RU RW SA SC SD SE SG SI SK SL SM SN ST SV SY SZ TD TG TH TJ TM TN TR TT TZ UA UG US UZ VC VN ZA ZM ZW

**Title:** SUGARCANE PROCESSING

**Abstract:** ABSTRACT OF THE DISCLOSURE

A process for treating sugarcane to obtain unitized strips of laterally interconnected **fibers** of sugarcane rind by removing the pith from one side of the rind and the epidermis material from the other side of the rind without disturbing the rind **fibers**. The rind **fiber** strips are subjected to forming pressure and unitized in a desired configuration.

### Classifications:

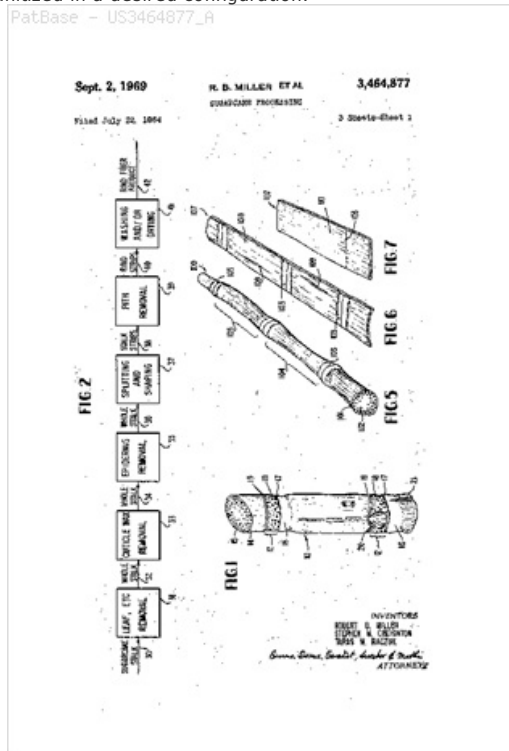
**International (IPC 8-9):** B27J1/00 B27N1/00 B27N3/04 B29J5/00  
D01B1/10 D04H13/00 E04C2/10 (Advanced/Invention);  
B27J1/00 B27N1/00 B27N3/04 D01B1/00 D04H13/00 (Core/Invention)

**International (IPC 1-7):** B27J5/00 B27J7/00 B29J5/00 B32B31/02  
C13C1/02 C13C1/04 D01B1/10 D01B1/20 D04H13/00 E04C2/16

**CPC:** Y10T156/1067 D01B1/10 B27J1/00 B27N1/00 B27N3/04  
D04H13/00

**European:** B27J1/00 B27N1/00 B27N3/04 D01B1/10 D04H13/00

**US:** 156/259 156/296 19/34



**Family:**

| Publication number | Publication date | Application number | Application date |
|--------------------|------------------|--------------------|------------------|
| AU6146165 A1       | 19670119         | AU19650061461      | 19650714         |
| BE667244 A         | 19651116         | BE19650667244      | 19650722         |
| DE1660460 A1       | 19710114         | DE1965M066020      | 19650719         |
| DE1660460 B2       | 19790104         | DE1965M066020      | 19650719         |
| DE1660460 C3       | 19790830         | DE1965M066020      | 19650719         |
| ES315706 A1        | 19660601         | ES19650315706      | 19650722         |
| FI48613 B          | 19740731         | FI19650001758      | 19650722         |
| FI48613 C          | 19741111         | FI19650001758      | 19650722         |
| GB1126492 A        | 19680905         | GB19650030498      | 19650719         |
| GB1126493 A        | 19680905         | GB19680000200      | 19650719         |
| IL23983 A1         | 19700129         | IL19650023983      | 19650719         |
| JP49004361 B4      | 19740131         | JP19700048793      | 19700608         |
| JP49042528 B4      | 19741115         | JP19650043938      | 19650722         |
| MY7200049 A        | 19721231         | MY19720000049      | 19721231         |
| MY7200050 A        | 19721231         | MY19720000050      | 19721231         |
| NL6509330 A        | 19660124         | NL19650009330      | 19650719         |
| OA1775 A           | 19700114         | OA19650052120      | 19650720         |
| SE328835 B         | 19700921         | SE19650009614      | 19650721         |
| US3464877 A        | 19690902         |                    | 19640722         |

**Priority:**

US19640384462 19640722

**Probable Assignee:** ROBERT BOOTHE MILLER

**Assignee(s):** (std): BOOTHE MILLER ROBERT ; GORDON E BRADT ; MILLER ; MILLER R ; MILLER R CA ; MILLER ROBERT BOOTHE ; ROBERT BOOTHE MILLER EDMONTON ; ROBERT B MILLER

**Assignee(s):** MILLER ROBERT BOOTHE EDMONTON ALBERTA CANADA ; ROBERT BOOTHE MILLER

**Inventor(s):** (std): RAZUK T ; RACZUK TARAS WILLIAM ; RACZUK TARAS W ; RACZUK T CA ; RACZUK ; MILLER ROBERT BOOTHE ; MILLER ROBERT B ; MILLER R ; MARK CREIGHTON STEPHEN ; EDMONTON ALBERTA CANADA ; CREIGHTON STEPHEN MARK ; CREIGHTON STEPHEN M ; CREIGHTON S CA ; CREIGHTON S ; CREIGHTON ; BOOTHE MILLER ROBERT ; WILLIAM RACZUK TARAS ; RACZUK T

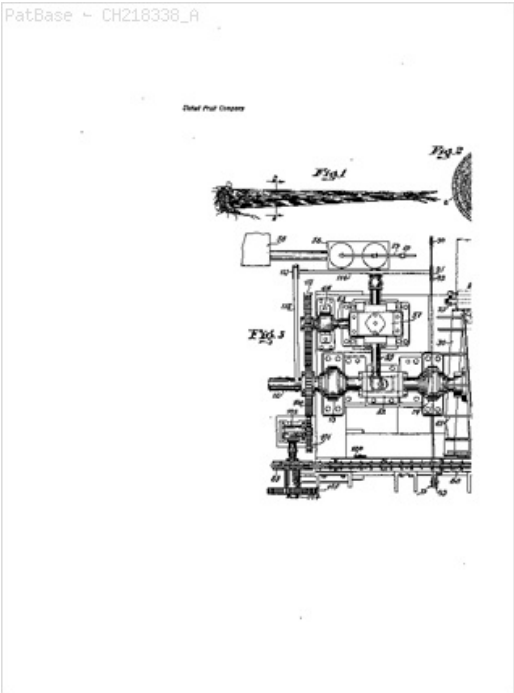
**Inventor(s):** TARAS W RACZUK ; STEPHEN M CREIGHTON ; ROBERT B MILLER ; ROBERT BOOTHE MILLER STEPHEN M CREIGHTON AND TARAS W KACZOR

**Agent(s):** MSLEVISOHN

**Title:** PROCEDE POUR L'OBTENTION DE LONGUES FIBRES VEGETALES ET MACHINE POUR LA MISE EN OEUVRE DE CE PROCEDE. METHOD FOR OBTAINING LONG VEGETABLE FIBER AND MACHINE FOR IMPLEMENTING THIS PROCESS. (Machine translation)

**Abstract:** Source: CH218338A [FR] 1. Procédé Selon la revendication I, ca racterise en ce que l'on maintient l'une des extremités de l'element de matiere vegetale susmentionnee. **Machine translation:** 1. Procédé According to claim I, ca acterized in that one maintains one of the ends of the above noted matter of vegetable element.

**Classifications:**  
**International (IPC 8-9):** D01B1/42 (Advanced/Invention);  
D01B1/00 (Core/Invention)  
**International (IPC 1-7):** D01B1/10  
**CPC:** D01B1/42  
**European:** D01B1/42



Family:

| Publication number | Publication date | Application number | Application date |
|--------------------|------------------|--------------------|------------------|
| CH218338 A         | 19411215         |                    | 00000000         |

**Priority:**  
19390412

**Probable Assignee:** UNITED FRUIT CO

**Assignee(s):** (std): UNITED FRUIT CO

**Assignee(s):** UNITED FRUIT COMPANY

**Inventor(s):** (std): FRUIT CO UNITED ; FRUIT COMPANY UNITED

**Inventor(s):** UNITED FRUIT CO ; COMPANY UNITED FRUIT

**Title:** MACHINE ET PROCEDE DE DECORTICATION MACHINE AND METHOD decortication (Machine translation)

**Abstract:** Source: FR1233166A [FR] (Claim 1) ieu de broyage interieur pour entrainer l'arbre 61 du transporteur d'alimentation 51 par l'intermediaire d'une chaine double 62 et d'un pignon 63.

**Machine translation:** (Claim 1) ieu grinding inside the shaft 61 for driving the feed conveyor 51 via a dual channel 62 and pinion 63.

**Classifications:**

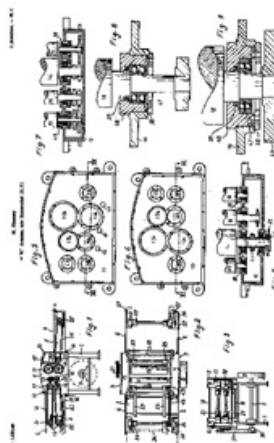
**International (IPC 8-9):** D01B1/10 (Advanced/Invention);  
D01B1/00 (Core/Invention)

**International (IPC 1-7):** A23N15/00

**CPC:** D01B1/10

**European:** D01B1/10

PatBase - FR1233166\_A



**Family:**

| Publication number | Publication date | Application number | Application date |
|--------------------|------------------|--------------------|------------------|
| FR1233166 A        | 19601012         | FR19590796566      | 19590604         |

**Priority:**

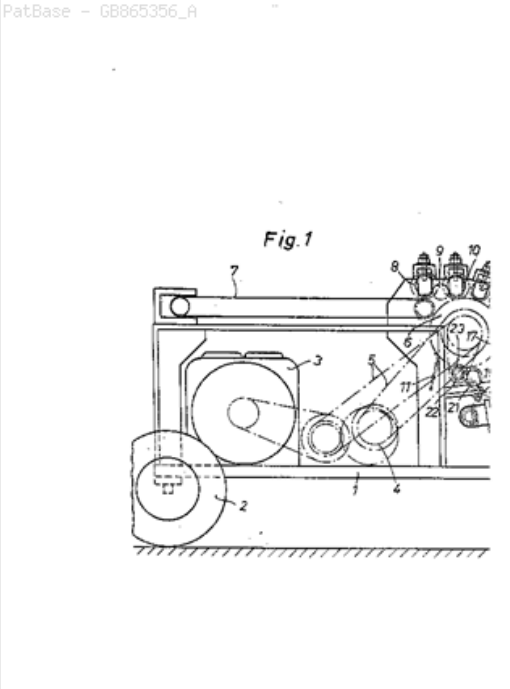
19580611 FR19590796566 19590604

**Inventor(s):** (std): ALMASSY ELEK ; ARENSON

**Title:** Improvements in or relating to **apparatus** for separating **fibres** from vegetable pulp

**Abstract:** 865,356. Decorticating **machines**. ZILHR, W. June 18, 1957 [June 18, 1956], No. 19226/57. Class 120(1). **Apparatus** for separating **fibres** from sappy fibrous vegetable material comprises a smoothsurfaced conveyer roll 6, smooth-surfaced squeezing rolls 10, 12, 16, 19 and scraping rolls 13, 18, 22 adjustably spaced from roll 6. The rolls are driven so that the squeezing rolls and scraping rolls 13, 18 move, at adjacent points, in the same linear direction as roll 6. As shown, material is fed to roll 6 by a conveyer 7 and a squeezing roll 8. The scraping rolls have axial blades, with rounded edges, which may be of flexible stainless steel, plastic or rubber. The squeezing and scraping rolls rotate with a peripheral speed at least equal to that of roll 6, and preferably the scraper rolls have a considerably higher peripheral speed than roll 6 or the squeezing rolls. The last scraping roll 22 rotates in the opposite direction to the other scraping rolls and operates to strip **fibre** from roll 6 and cause it to pass around a roll 21 whence it is stripped by a plate 24 on to a delivery conveyer band 25. A stripper plate 17 prevents **fibre** adhering to roll 16, and a stripper plate 11 deflects **juice** extracted by rolls 8, 10. Pulp scraped off by rolls 13, 18 is thrown against a splash board 15 and collected on a transverse conveyer 20.

**Classifications:**  
**International (IPC 8-9):** D01B1/10 (Advanced/Invention);  
D01B1/00 (Core/Invention)  
**CPC:** D01B1/10  
**European:** D01B1/10



**Family:**

| Publication number | Publication date | Application number | Application date |
|--------------------|------------------|--------------------|------------------|
| GB865356 A         | 19610412         | GB19570019226      | 19570618         |

**Priority:**  
19560618

**Probable Assignee:** WALTER ZIEHR  
**Assignee(s):** (std) WALTER ZIEHR

**Title:** Machine for the separation of the tissue part from the juices or oils of vegetal products

**Abstract:** 727,030. Treating fodder. P.A.S.T. PRODOTTI ALIMENTARI SISTEMA TALLARICO. Feb. 26, 1952 [Feb. 26, 1951; Dec. 15, 1951], No. 5003/52. Class 5 (2). [Also in Groups II and VI] A machine for separating tissue from juices of vegetal products such as fodder, vegetables and fruits comprises two grooved and parallel disintegrating cylinders 44 which rotate in opposite directions and at different speeds under a hopper 26, two pressing worms 9, axially separated by a distance less than the sum of their radii, contained in a slotted casing 11 enclosed in an outer cover 25, and two oppositely moving rakes 21 which disaggregate compressed tissue coming from the worms. The worms do not extend to the end of the cover but leave a compression chamber closed by a shutter 23 loaded by a spring 16 the pressure of which may be varied by a screw 21 or by changing the spring. The pitch of each worm may decrease and the diameter of its shaft 51 may increase in the direction of propulsion of tissue. The casing may comprise two major segments of a cylinder connected along their longitudinal edges and may be reinforced by steel rings between which cocoafibre strainers may be fitted. The cover has a juice outlet 12 leading into a sump 10. Each rake may be in the form of a shaft having teeth lying substantially in one plane. The two rakes may be rocked alternately upwards and downwards so that the teeth of one pass between those of the other. To facilitate treatment of fodders having large stems, two oppositely rotating, star-sectioned breaking rollers may be removably mounted in the hopper above the disintegrating cylinders. To facilitate treatment of olives, a grate may be provided in the hopper over the disintegrating cylinders together with a shaft carrying helically arranged teeth which pass between the bars of the grate when the shaft is rotated. Vegetal products may be fed into the hopper by a belt conveyer.

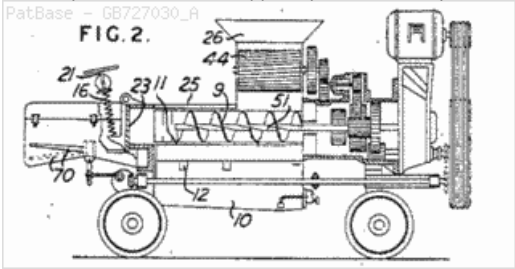
**Classifications:**

**International (IPC 8-9):** D01B1/10 (Advanced/Invention);

D01B1/00 (Core/Invention)

**CPC:** D01B1/10

**European:** D01B1/10



**Family:**

| Publication number | Publication date | Application number | Application date |
|--------------------|------------------|--------------------|------------------|
| GB727030 A         | 19550330         | GB19520005003      | 19520226         |

**Priority:**

19510226

**Probable Assignee:** P A S T PRODOTTI ALIMENTARI SI

**Assignee(s): (std):** P A S T PRODOTTI ALIMENTARI SI

**Assignee(s):** P A S T PRODOTTI ALIMENTARI SISTEMA TALLARICO

**Title:** FABRICATION OF PRODUCTS FROM AGAVE LECHUGUILLA

**Abstract:** (Claim 1) 1. A process for extracting the natural products of the Agave lechuguilla plant and related species comprising the steps of dejuicing the succulent parts of the plant, feeding the dejuiced parts into contact with a plurality of rotating hammer mill blades at a speed of between 800 to 2000 r.p.m., said blades having a diameter of rotation not exceeding about 27 inches, subjecting the parts to the beating action of said blades, and thus forcing said parts against a plurality of adjustable and triangular shaped grid bars in an arcuate path to separate the **fibers** from the pulp.

**Classifications:**

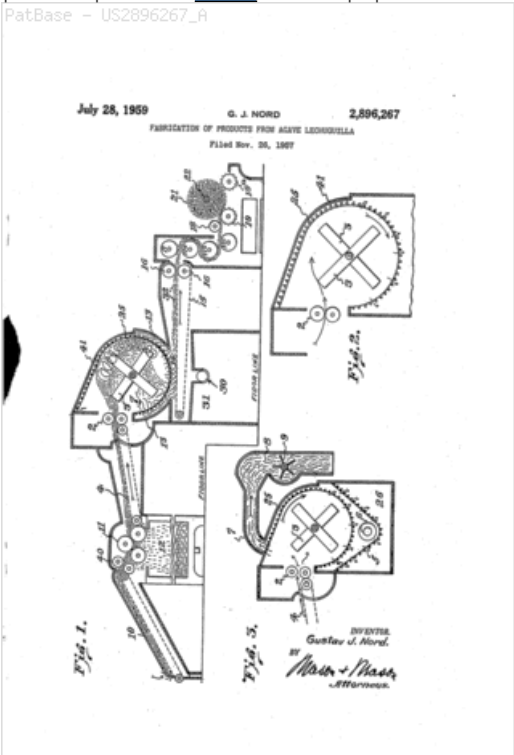
**International (IPC 8-9):** D01B1/10 (Advanced/Invention);  
D01B1/00 (Core/Invention)

**International (IPC 1-7):** A61K35/78 D01B1/28

**CPC:** D01B1/10

**European:** D01B1/10

**US:** 100/121 19/27 19/33 19/8 19/89



**Family:**

| Publication number | Publication date | Application number | Application date |
|--------------------|------------------|--------------------|------------------|
| US2896267 A        | 19590728         | US19570699133      | 19571126         |

**Priority:**

US19570699133 19571126

**Probable Assignee:**

NORD GUSTAV J

**Assignee(s):** (std):

NORD GUSTAV J

**Inventor(s):** (std):

NORD GUSTAV J

Title: **APPARATUS** AND METHOD FOR PROCESSING FIBROUS STALKS

**Abstract:** ABSTRACT OF THE DISCLOSURE

Apparatus for processing fragments of crushed fi-brous stalks containing pith to separate the pith and the **fiber** including a vertically disposed casing forming a closed Chamber with a feed opening at the top and an out-let at the bottom, a cylindrical screening element inside said casing and mounted so that the feed opening leads to the interior of the screening element, a rotor assembly coaxially mounted inside the screening element and hav-ing a plurality of hammers laterally extending to close proximity -with the screening element and arranged to centrifugally and helically propel fragments to be pro-cessed through the treating zone defined by the cylindrical screening element and separate the pith fraction from the **fiber** fraction in the course of the travel through the screening element. According to the method the fragments are centrifugally and helically propelled and gravity fed through the treating zone defined by a vertical cylindrical screening element, in the absence of any extraneous arti-ficially created air pressure differenti als, so that a layer of axially aligned oriented fragments is formed on the inner surface of the screening element and the pith is separated by the rolling and rubbing action of the fragments on each other and is forced to the exterior of the screening element by centrifugai forces applied.

**Classifications:**

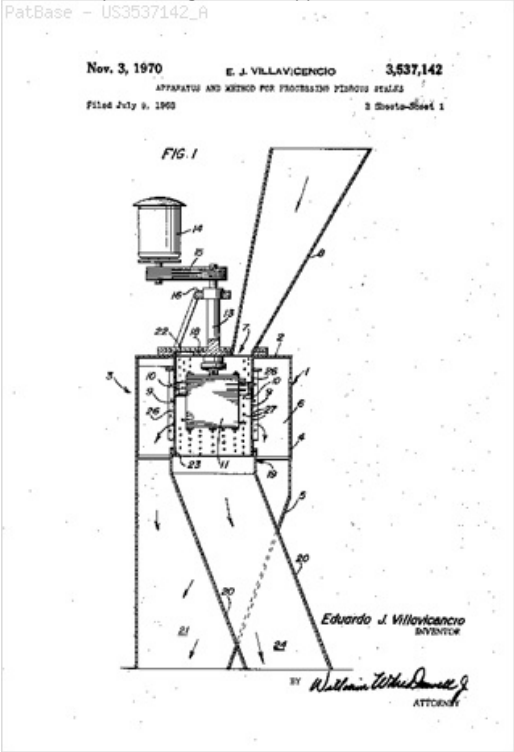
**International (IPC 8-9):** D01B1/10 (Advanced/Invention);  
D01B1/00 (Core/Invention)

**International (IPC 1-7):** C13C1/02 D01B1/26 D01B1/30 D21B

**CPC:** D01B1/10

**European:** D01B1/10

**US:** 19/26 19/260



**Family:**

| Publication number | Publication date | Application number | Application date |
|--------------------|------------------|--------------------|------------------|
| BR6803861 A0       | 19730116         | BR19680203861      | 19681111         |
| ES369294 A1        | 19710501         | ES19690369294      | 19690708         |
| ES388788 A1        | 19740301         | ES19710388788      | 19710302         |
| FR1591212 A        | 19700427         |                    | 19681031         |
| US3537142 A        | 19701103         | US19680743344      | 19680709         |

**Priority:**

US19680743344 19680709

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**Inventor(s):** (std): VILLAVICENCIO E ; VILLAVICENCIO EDUARDO JOEL

**Inventor(s):** EDUARDO JOEL VILLAVICENCIO

**Title:** PROCESS FOR SEPARATING PITH FROM BAGASSE

**Abstract:** (Claim 1) What is claimed is: A dry process of producing substantially pith free **fiber** from bagasse comprising feeding at a metered rate, fresh fragments of bagasse having a moisture content of up to 50 percent in one end of a fixed cylindrical vessel having a treating zone including a circumferentially continuous inner surface of unobstructed uniform diameter, at least a portion of said surface being a foraminous material, moving the fragments of bagasse in a helical path around the inner periphery of the vessel from said one end to the other end by contact with rotary agitating members rotating at an angular speed sufficient to main-tain the bagasse fragments spread in a layer over the inner surface of the vessel to subject the bagasse to transverse rubbing because of the differential speed be-tween the portion of the bagasse at a zone adjacent the surface of the vessel and a zone radially inward adjacent the agitating members whereby the individual fibrous fragments of bagasse are forced across each other by reason of the differential speed of rotation to loosen the pith particles therefrom while subjecting the fragments to an outwardly directed radial current of air over the foraminous portion of the periphery of the vessel so as to prevent the moisture from causing the pith to adh  re to the **fiber** and to remove the loosened pith particles, and discharging processed bagasse **fibers** from said other end of said vessel to produce a **fiber** containing less than 9 percent retained pith particles.

**Classifications:**

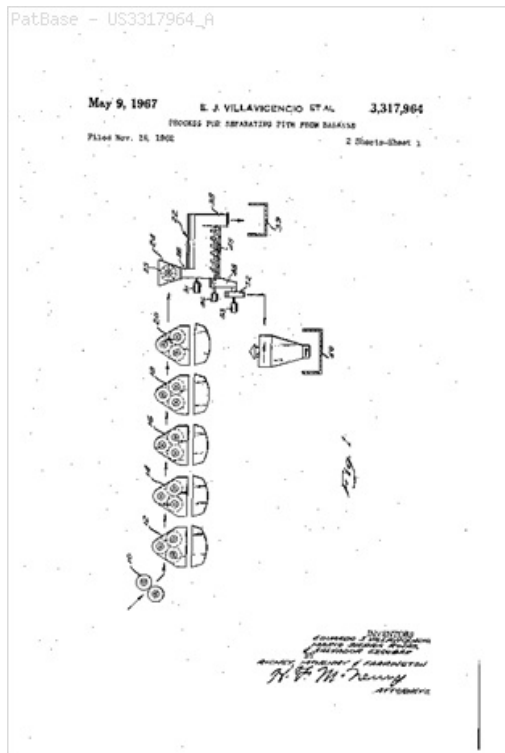
**International (IPC 8-9):** B02C13/10 D01B1/10 (Advanced/Invention);  
D01B1/00 (Core/Invention)

**International (IPC 1-7):** D01B1/10

**CPC:** D01B1/10

**European:** D01B1/10

**US:** 19/34 19/5R 19/90



**Family:**

| Publication number | Publication date | Application number | Application date |
|--------------------|------------------|--------------------|------------------|
| AU3773363 A1       | 19650520         | AU19630037733      | 19631118         |
| ES293599 A1        | 19640301         | ES19630293599      | 19631116         |
| US3317964 A        | 19670509         | US19620238227      | 19621116         |

**Priority:**

US19620238227 19621116

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