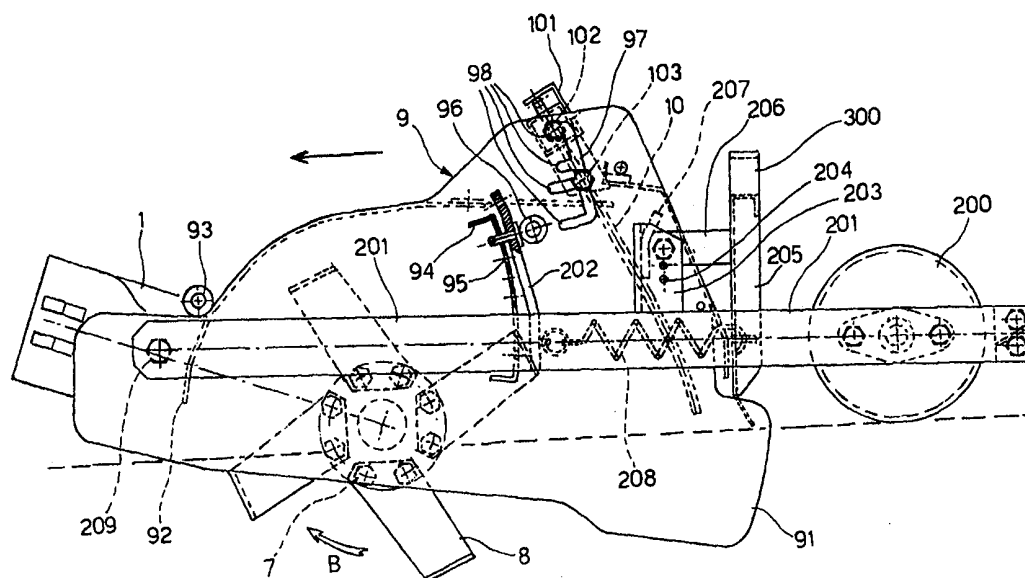




INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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(21) International Application Number: PCT/EP99/04937 (22) International Filing Date: 10 July 1999 (10.07.99) (30) Priority Data: RE98A000074 17 July 1998 (17.07.98) IT RE99A000038 2 April 1999 (02.04.99) IT (71)(72) Applicant and Inventor: CARBONI, Renzo [IT/IT]; Via G. Pascoli, 4, I-42022 Boretto (IT). (74) Agents: CORRADINI, Corrado et al.; Via Dante Alighieri, 4, I-42100 Reggio Emilia (IT).		(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i> (88) Date of publication of the international search report: 11 May 2000 (11.05.00)	

(54) Title: IMPLEMENT FOR CRUSHING AND OVERTURNING A COMPACT LAYER OF SOIL



(57) Abstract

A soil-working implement comprising a frame (1) provided with two side walls and arranged to be mounted on two wheels or applied to the rear lift of a tractor, a series of hoes (8) rotating about a horizontal axis perpendicular to the direction in which the implement advances, and a grid (10) positioned to the rear of said series of rotary hoes, in which the grid is adjustable relative to the series of hoes, and is associated with a rear levelling bar.

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INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP 99/04937

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 A01B33/02 A01B33/16

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)
IPC 7 A01B E01C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	GB 1 313 744 A (ROTARY HOES) 18 April 1973 (1973-04-18) page 3, line 47 - line 52; figures	1,2
Y		3,21,24
A		4
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X	FR 2 291 693 A (JULLIEN) 18 June 1976 (1976-06-18) figures	1
	-/--	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Date of the actual completion of the international search

9 March 2000

Date of mailing of the international search report

15.03.00

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INTERNATIONAL SEARCH REPORT

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PCT/EP 99/04937

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	CH 361 685 A (BACHMANN) figures ----	3,4
X	US 4 560 009 A (LINDBECK) 24 December 1985 (1985-12-24) abstract; figures	18
Y	-----	19-21,24
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A	WO 88 06399 A (RAU) 7 September 1988 (1988-09-07) figures -----	20

INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP 99/04937

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☒ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☒ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 1-17,22,23,25

Soil working implement comprising hoes rotating about a horizontal axis, an adjustable grid and a rear levelling bar.

2. Claims: 18-21,24

Soil working implement comprising hoes rotating about a horizontal axis, a grid and scraper means.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP 99/04937

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