

# JAPIO - Patent Abstracts of Japan

## FILE DESCRIPTION

The **JAPIO** database, provided by the Japan Patent Information Organization, represents the most comprehensive English-language access to Japanese unexamined patent applications (Kokai Tokkyo Koho) published since October 1976. All technologies are covered. Application records include both Japanese and non-Japanese priorities. Abstracts are provided only for applications originating in Japan, but are available for most records. Images of front page drawings, when available for a given patent, are also included.

## SUBJECT COVERAGE

**JAPIO** covers patents in four major fields:

- **MECHANICAL** (tools, vehicles, machines, engines, components)
- **CHEMICAL** (organic, inorganic, medical, biochemical, food chemistry, metallurgy, chemical apparatus and processes)
- **ELECTRICAL** (semiconductors, circuitry, electric machines, communications, radiation technology)
- and **PHYSICAL** (computing, information storage, measuring and testing, photography, optics)

## SOURCES

**JAPIO** is based on the print *Patent Abstracts of Japan*, produced by the Japan Patent Information Organization. *Patent Abstracts of Japan* is issued approximately four months after the original publication of the documents in the Japanese patent gazette.

## TIPS

### USE FILE 347

to locate unexamined Japanese patents in all areas of technology

### USE PN=

to find a particular Japanese patent

SELECT PN=JP 4037553

### USE MAP

to save terms from a specific field for searching in the same or another file

SELECT TOPIC; MAP PN TEMP

### USE RANK

for statistical analysis of a data field such as patent assignee

SELECT TOPIC; RANK PN

## DIALOG FILE DATA

Inclusive Dates: October 1976 to the present

Update Frequency: Monthly

File Size: 6 million records as of April 1999

## CONTACT

**JAPIO** is produced by the Japan Patent Information Organization. Questions concerning file content should be directed to:

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DIALOG(R)File 347:JAPIO  
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05773737     \*\*Image available\*\*  
SULKY RICE TRANSPLANTER

/TI  
  
/PN, PC=, PN=  
PD=, PY=  
AU=  
CO=, PA=  
/AN, AC=, AN=  
AD=  
IC=, /IC

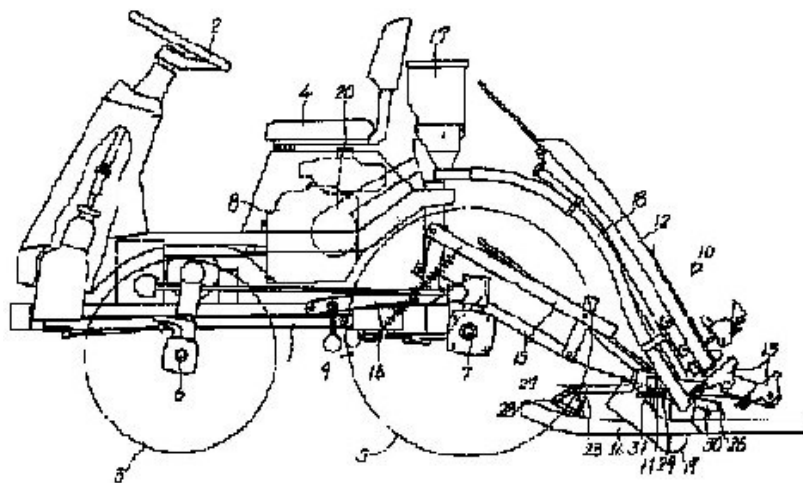
PUB. NO.:       10-056837 [JP 10056837 A]  
PUBLISHED:     March 03, 1998 (19980303)  
INVENTOR(s):   ISHIDA ISAO  
APPLICANT(s):  ISEKI & CO LTD  
APPL. NO.:     09-181241 [JP 97181241]  
FILED:         July 07, 1997 (19970707)  
INTL CLASS:    A01C-011/02; A01C-011/02

ABSTRACT

/AB    PROBLEM TO BE SOLVED: To provide a sulky rice transplanter capable of eliminating problems in control to the shallow planting, planting seedlings at a proper depth and improving the work efficiency and operating accuracy by controlling operations to deep planting when the forward descending tilt of the car body is large.

/AB    SOLUTION: This sulky rice transplanter is obtained by controlling operations to deep planting when the forward descending tilt of the car body is large in the sulky rice transplanter equipped with a seedling transplanting device 10 attached to the rear side of the sulky type car body so as to enable the lifting and lowering, a float 14 installed in the lower part of the seedling transplanting device 10 so as to vertically move the front thereof around a shaft 26 provided near seedling planting devices 13 when viewed from the side of the machine body and capable of controlling operations so as to keep the seedling planting depth constant based on a change in an elevation angle of the float 14 relatively to the seedling transplanting device 10.

Image



SAMPLE RECORD - JAPANESE PRIORITY APPLICATION - OLD FORMAT

DIALOG(R)File 347:JAPIO  
 (c) 2006 JPO & JAPIO. All rts. reserv.  
  
 03672453  
 /TI INK JET RECORDING DEVICE  
  
 /PN, PC=, PN= PUB. NO.: 04-037553 [JP 4037553 A]  
 PD= PUBLISHED: February 07, 1992 (19920207)  
 AU= INVENTOR(s): FUJII MASAHIKO  
 CO=, PA= APPLICANT(s): FUJII XEROX CO LTD  
 /AN, AN=, AC= APPL. NO.: 02-143692 [JP 90143692]  
 AD= FILED: June 01, 1990 (19900601)  
 IC=, /IC INTL CLASS: [5] B41J-002/05; B41J-002/12; B41J-002/175; B41J-002/205  
 /DE, CL= JAPIO CLASS: 29.4 (PRECISION INSTRUMENTS -- Business Machines)  
 KW= JAPIO KEYWORD:R005 (PIEZOELECTRIC FERROELECTRIC SUBSTANCES); R105  
 (INFORMATION PROCESSING -- Ink Jet Printers)  
 JOURNAL: Section: M, \_Section No. 1250, Vol. 16, No. 212, Pg. 164, May  
 19, 1992 (19920519)  
  
 ABSTRACT  
 /AB PURPOSE: To form a high-quality image which is almost free from any missing  
 part or ink stain by providing a temperature control device which controls  
 the temperature of a printing head and a temperature setting device which  
 sets the controlled temperature of the temperature control device.  
  
 /AB CONSTITUTION: Ink 10 is supplied one-way to an ink path 9 from an ink  
 supply orifice 2 and a voltage from an electrode pulse is applied to a  
 heater 7 installed in the path. Ink droplets 8 are ejected from a nozzle 6  
 (...)

SAMPLE RECORD - WITH NEW IPC FORMAT

DIALOG(R)File 347:JAPIO  
 (c) 2006 JPO & JAPIO. All rts. reserv.  
  
 08803537 \*\*Image available\*\*  
 /TI RF ELECTROMAGNETIC FIELD HEATING TYPE DIODE FOR THERMALLY SUPPORTING  
 SWITCHING OF MAGNETIC MEMORY ELEMENT  
  
 /PN, PC=, PN= PUB. NO.: 2006-196897 [JP 2006196897 A]  
 PD= PUBLISHED: July 27, 2006 (20060727)  
 AU= INVENTOR(s): NICKEL JANICE H  
 CO=, PA=, EN= APPLICANT(s): HEWLETT-PACKARD DEVELOPMENT CO LP  
 /AN, AC=, AN= APPL. NO.: 2006-003312 [JP 20063312]  
 AD= FILED: January 11, 2006 (20060111)  
 AN=, AC=, /AN, CN= PRIORITY: 05 034418 [US 200534418], US (United States of America),  
 AD= January 12, 2005 (20050112)  
  
 IC=, /IC International Patent Class (v8 + Attributes)  
 IPC + Level Value Position Status Version Action Source Office:  
 H01L-0027/105 A I F B 20060101 20060630 H JP  
 H01L-0021/8246 A I L B 20060101 20060630 H JP  
  
 ABSTRACT  
 /AB PROBLEM TO BE SOLVED: To provide a method for heating a diode near a  
 magnetic memory element without always applying voltage that is higher than  
 a breakdown voltage in the diode in a magnetic memory structure.  
 SOLUTION: An illustrative array having a thermally supported magnetic  
 memory structure comprises a plurality of magnetic memory elements 100,  
 where each magnetic memory element 100 is near the diode 410. By absorbing  
 energy from a high-frequency electromagnetic field, the diode 410 near the  
 selected magnetic memory element 100 can be heated. By using the heated  
 diode 410, temperature is increased in the selected magnetic memory element  
 100, and the switching of a magnetic state in the magnetic memory element  
 can be thermally supported when a write current is added.  
  
 COPYRIGHT: (C)2006,JPO&NCIPI

## SEARCH OPTIONS

## BASIC INDEX

SEARCH SUFFIX	DISPLAY CODE	FIELD NAME	INDEXING	SELECT EXAMPLES
— /AB /AN	— AB AN	All Basic Index Fields Abstract <sup>1</sup> Application Number (JAPIO Format) <sup>2</sup>	Word Word Phrase	S PRINT? S PRINTING(W)HEAD/AB S 02-143692/AN S 2-143702/AN S 2000-000059/AN S 2000000059/AN S (PRINTER?(N)JET)/DE
/DE /IC	DE IC	JAPIO Class and Keyword <sup>3,4</sup> International Patent Class(JAPIO Format) <sup>5</sup>	Word Phrase	S B41J 2-05/IC S B41J/IC
/PN	PN	Publication Number (JAPIO Format) <sup>2</sup>	Phrase	S 04-037553/PN S 4037553/PN
/TI	TI	Title	Word	S 2000000144/PN S INK(W)JET/TI

<sup>1</sup> Abstracts available only for applications originating in Japan (Japanese priority and Japanese applicant). Records prior to 1980 may contain a short summary rather than an abstract.

<sup>2</sup> Searchable in the Basic Index and in the Additional Indexes.

<sup>3</sup> JAPIO Classes and Keywords are searchable as codes or complete phrases using CL= and KW=, or by individual word in the Basic Index using /DE. EXPAND CL=1 or EXPAND KW=R001 to get a complete listing of codes and terms.

<sup>4</sup> The fields, Applicant Entity, Applicant Country, JAPIO Class, JAPIO Keywords, and Source were discontinued in December 1998, JAPIO Class and JAPIO Keywords display in records published before January 1999,

<sup>5</sup> IPC codes prior to version 8 (from January 2006) are also searchable in JAPIO format in the Basic Index using /IC. Note that the IPC version number is omitted after December 1998.

## ADDITIONAL INDEXES

SEARCH PREFIX	DISPLAY CODE	FIELD NAME	INDEXING	SELECT EXAMPLES
AC= AC= AD=	AC AC AD	Application Country Priority Application Country <sup>6,7</sup> Application Date <sup>8</sup>	Phrase Phrase Phrase	S AC=JP S AC=EP/PR S AD=1990 S AD=199011 S AD=19901128
AD= AN=	AD AN	Priority Application Date <sup>6,7,8</sup> Application Number <sup>6,7,13,14</sup>	Phrase Phrase	S AD=19900615/PR S AN=JP 90323373 S AN=02-323373 S AN=2000-000059 S AN=JP 200059
AN=	AN	Priority Application Number <sup>6,7,13,14</sup>	Phrase	S AN=EP 90111303/PR S AN=US 421488-1989/PR S AN=JP 90143692/PR S AN=02-143692/PR
AU= — CL=	AU AZ CL	Author/Inventor <sup>9</sup> DIALOG Accession Number JAPIO Class <sup>3,4</sup>	Phrase Phrase	S AU=FUJII M? S CL=12.5 S CL=METALS -- WORKING S CL=METALS?
CN= CN=	CN CN	Country of Applicant <sup>6</sup> Priority Country or Country of Applicant <sup>4,6</sup>	Phrase Phrase	S CN=DE/PA S CN=DE S CN=DE/PR S CN=GERMANY
CO= DT=	CO —	Patent Applicant/Assignee <sup>10</sup> Document Type (JAPIO Section)	Phrase Phrase	S CO=FUJI XEROX? S DT=MECHANICAL S DT=M
EN=	—	Applicant Entity <sup>4</sup>	Phrase	S EN=INDIVIDUAL S EN=NON JAPANESE?
IA=	IC	International Patent Class Attributes (IPCR/8) <sup>5,11,12</sup>	Phrase	S IA=I S IC=H01L-0027/105(s)IA=F
IC=	IC	International Patent Class <sup>5,11,12</sup>	Phrase & Phrase	S IC=B41J-002/05 OR IC=B41J-0002/05 S IC=B41J S IC=H01L-0027/105(s)IA=F
— KW=	IM KW	Image <sup>15</sup> JAPIO Keyword <sup>3,4</sup>	Phrase	S KW=R105 S KW=INFORMATION PROCESSING?
PA=	PA	Patent Applicant/Assignee <sup>10</sup>	Word & Phrase	S PA=(FUJI(W)XEROX) S PA=WILHELM HEGEN?
PC=	PC	Patent Country and Kind	Phrase	S PC=JP S PC=JP A
PD=	PD	Publication Date <sup>8</sup>	Phrase	S PD=199202 S PD=19920207
PN=	PN	Publication Number (DIALOG and JAPIO Formats) <sup>13</sup>	Phrase	S PN=JP 4037553 S PN=4-037553 S PN=2000-000144 S PN=JP 2000000144

## ADDITIONAL INDEXES (cont'd)

SEARCH PREFIX	DISPLAY CODE	FIELD NAME	INDEXING	SELECT EXAMPLES
—	PR	Priority Data		
PY=	PY	Publication Year	Phrase	S PY=1992
RT=	—	Record Type	Phrase	S RT=IMAGE
UD=	—	Update	Phrase	S UD=9999

<sup>6</sup> Special suffixes are used to further restrict the appropriate prefixed fields as noted: /PR (Priority) and /PA (Country of Applicant). The Country of Applicant was discontinued in December 1998.

<sup>7</sup> Japanese application numbers are also searchable in the Basic Index in JAPIO format using /AN. Non-Japanese application numbers are indexed in standard DIALOG format only. If there is no non-Japanese priority field, the Japanese application data is designated as priority.

<sup>8</sup> Dates can be searched with either 2-digit or 4-digit years, e.g., S AD=199011 or S AD=9011; S PD=19901128 or S PD=901128.

<sup>9</sup> Format is: last name first name. Non-Japanese author names are usually transliterated and may not be in last name/first name order.

<sup>10</sup> Applicant names may be transliterated. Use PA= for cross-file searching with other patent databases.

<sup>11</sup> With the introduction of the Reformed International Patent Classification (IPCR/8) on January 1, 2006, the format of the IPC group has increased in length from 3 to 4 digits. For comprehensive retrieval, both forms of the classification should be searched, e.g., S IC=H04R-025/00 OR IC=H04R-0025/00 . Advanced level classification codes can be searched directly in the ICA= index. IPCR/8 Classification codes can be linked to their attributes using the S operator.

<sup>12</sup> Each IPCR/8 classification code is also assigned a series of attributes. These include classification level (A - Advanced, C - Core, S - Subclass), value (I - Inventive, N - Non-inventive), position (F - First, L - Later), status (B - basic, R - Reclassified, V - Various, D - Deleted), version date, action date, source (H - Human, M - Machine, G - Generated), and assigning office. The classification attributes can be searched with the IA= prefix and can be linked to an IPCR/8 classification code (assigned after January 1, 2006) using the S operator and quotes around the classification code, e.g., S IA=F(S)IC="A61K-0031/198" .

<sup>13</sup> Japanese patent and application numbers use the 2-digit Emperor Year prior to the year 2000. Publication numbers are also searchable in the Basic Index in JAPIO format (without country code) using /PN or /AN.

<sup>14</sup> For MAPPING, use ANPR to extract only priority application numbers. Use ANYY to extract U.S. application numbers that include a four-digit year following the number.

<sup>15</sup> Images can be displayed when searches are conducted on the Internet using Dialog Web or DialogClassic. For modem connections, proper display of images requires DialogLink for Windows or DialogLink Version 1.2 or higher.

**SPECIAL FEATURES**

For command descriptions, enter HELP LIMIT, HELP SORT, HELP RANK, HELP MAP, HELP IDPAT online.

<b>LIMIT</b>	/ABS -- Abstract Present /NOABS -- No Abstract Present /YYYY -- Publication Year	S S2/ABS S S3/NOABS S S2/1987
<b>SORT</b>	AU, CL, CN, CO, IC, PA, PD, PN, PY, TI	SORT S6/ALL/TI
<b>RANK</b>	All phrase- and numeric-indexed fields in the Additional Indexes can be ranked.	RANK IC
<b>MAP</b>	AN, ANPR, ANYY, CO, IC, PA, PN	MAP PN TEMP S3
<b>IDPAT</b>	Identify patent duplicates and display all or selected patent groups.	IDPAT IDPAT S1 SHORT

**PREDEFINED FORMAT OPTIONS**

NO.	DIALOGWEB FORMAT	RECORD CONTENT
1	--	DIALOG Accession Number
2	--	DIALOG Accession Number, Title, Publication Number and Date, Inventor, Applicant, Application Number and Date, Priority Data, and International Class Codes
3	Medium	DIALOG Accession Number, Title, Publication Number and Date, Inventor, Applicant, Application Number and Date, and Priority Data
4	--	Full Record with Tagged Fields <sup>1</sup>
5	--	Full Record <sup>1</sup>
6	--	Title
7	--	All Data in Format 3 plus Abstract <sup>1</sup>
8	Short	DIALOG Accession Number, Title and International Class Codes
9	Long	Full Record <sup>1</sup>
19	Full	Full Record plus Image <sup>15</sup>
69	--	Image only <sup>15</sup>
K	--	KWIC (Key Word In Context) displays a window of text; may be used alone or with other formats

**OTHER OUTPUT OPTIONS**

For an explanation, enter HELP TYPE, HELP UDF, HELP TAG online.

<b>USER DEFINED FORMATS</b>	User-defined formats can be specified using the display codes indicated in the Search Options tables.	TYPE S3/TI,PN/1-5
<b>TAG</b>	Output can be displayed with tags identifying each display field.	TYPE S2/3/1-5 TAG
<b>DIRECT RECORD ACCESS</b>	DIALOG Accession Number	TYPE 0022037/5 DISPLAY 0074483/PA,TI PRINT 0301964/5

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See HELP FIELDS 347 for searchable fields; HELP FORMAT 347 for output formats; HELP LIMIT 347 for limits; HELP RATES 347 for cost information; HELP SORT 347 for sorts.