## United States Patent [19]

Kobayashi et al.

WIRE SAW HOUSING [54]

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- Assignee: Nippei Toyama Corporation. Tokyo. [73] Japan

14 Years [\*\*] Term:

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[45]	Date of Patent:	**Jan. 5, 1999

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FIG. 2 is a rear elevational view thereof: FIG. 3 is a bottom plan view thereof; FIG. 4 is a top plan view thereof; FIG. 5 is a right side elevational view thereof; FIG. 6 is a left side elevational view thereof: FIG. 7 is a front perspective view thereof; FIG. 8 is a rear perspective view thereof; and FIG. 9 is a front perspective view thereof with the front doors opened; FIG. 10 is a front elevational view of a second embodiment of the wire saw housing; FIG. 11 is a rear elevational view thereof; FIG. 12 is a top plan view thereof; FIG. 13 is a bottom plan view thereof; FIG. 14 is a right side elevational view thereof; FIG. 15 is a left side elevational view thereof; FIG. 16 is a front perspective view thereof; FIG. 17 is a rear perspective view thereof; and FIG. 18 is a front perspective view thereof with the front doors opened; FIG. 19 is a front elevational view of a third embodiment of the wire saw housing; FIG. 20 is a rear elevational view thereof: FIG. 21 is a top plan view thereof; FIG. 22 is a bottom plan view thereof; FIG. 23 is a right side elevational view thereof; FIG. 24 is a left side elevational view thereof: FIG. 25 is a front perspective view thereof; FIG. 26 is a rear perspective view thereof; and FIG. 27 is a front perspective view thereof with the front doors opened; FIG. 28 is a front elevational view of a fourth embodiment of the wire saw housing; FIG. 29 is a rear elevational view thereof; FIG. 30 is a top plan view thereof; FIG. 31 is a bottom plan view thereof; FIG. 32 is a right side elevational view thereof; FIG. 33 is a left side elevational view thereof: FIG. 34 is a front perspective view thereof; FIG. 35 is a rear perspective view thereof; and FIG. 36 is a front perspective view of a thereof with the front doors opened; FIG. 37 is a front elevational view of a fifth embodiment of the wire saw housing;

[21] Appl. No.: 64,300

Mar. 20, 1997 Filed: [22]

#### Foreign Application Priority Data [30]

Jun. 2	8, 1996	[JP]	Japan	*********************************	8-19227
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Dec.	6, 1996	[ <b>J</b> P]	Japan	***************************************	8-37131
Dec.	6. 1996	[JP]	Japan		8-37132
Dec.	6, 1996	[JP]	Japan		8-37133
[51]		CL		******	15-09
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[52]	U.S. CI.	**********	**********		
[58]	Field of a	Search		D15/133; 8	3/651.1.
ĘJ		83	3/387.1	, 785, 788; 125/12, 2	1, 16.01,
		••		22.451/	

22; 451/296, 526

#### **References** Cited [56] U.S. PATENT DOCUMENTS

6/1993 Lenard et al. ..... D15/133 X D. 336,749

Primary Examiner—Antoine Duval Davis Attorney, Agent, or Firm-Stetina Brunda Garred & Brucker

CLAIM [57]

The ornamental design for a wire saw housing, as shown and described.

#### DESCRIPTION

FIG. 1 is a front elevational view of a wire saw housing;

(List continued on next page.)





#### Des. 403,685 Page 2

#### DESCRIPTION

FIG. 38 is a rear elevational view thereof;

FIG. 39 is a top plan view thereof;

FIG. 40 is a bottom plan view thereof;

FIG. 41 is a right side elvational view thereof, the left side

elevational view being a mirror image of FIG. 41;

FIG. 42 is a front perspective view thereof;

FIG. 43 is a rear perspective view thereof; and

FIG. 44 is a front perspective view thereof with the front

FIG. 81 is a rear elevational view thereof:

FIG. 82 is a top plan view thereof;

FIG. 83 is a bottom plan view thereof;

FIG. 84 is a right side elevational view thereof;

FIG. 85 is a left side elevational view thereof:

FIG. 86 is a front perspective view thereof;

FIG. 87 is a rear perspective view thereof; and

FIG. 88 is a front perspective view thereof with the front doors opened;

FIG. 89 is a front elevational view of a eleventh embodiment of the wire saw housing; FIG. 90 is a rear elevational view thereof; FIG. 91 is a top plan view thereof; FIG. 92 is a bottom plan view thereof; FIG. 93 is a right side elevational view thereof; FIG. 94 is a left side elevational view thereof; FIG. 95 is a front perspective view thereof; FIG. 96 is a rear perspective view thereof; and FIG. 97 is a front perspective view thereof with the front doors opened; FIG. 98 is a front elevational view of a twelfth embodiment of the wire saw housing; FIG. 99 is a rear elevational view thereof; FIG. 100 is a top plan view thereof; FIG. 101 is a bottom plan view thereof; FIG. 102 is a right side elevational view thereof; FIG. 103 is a left side elevational view thereof; FIG. 104 is a front perspective view thereof; FIG. 105 is a rear perspective view thereof; and FIG. 106 is a front perspective view thereof with the front doors opened; FIG. 107 is a front elevational view of a thirteenth embodiment of the wire saw housing; FIG. 108 is a rear elevational view thereof: FIG. 109 is a top plan view thereof; FIG. 110 is a bottom plan view thereof; FIG. 111 is a right side elevational view thereof; FIG. 112 is a left side elevational view thereof; FIG. 113 is a front perspective view thereof; FIG. 114 is a rear perspective view thereof; and FIG. 115 is a front perspective view thereof with the front doors opened; FIG. 116 is a front elevational view of a fourteenth embodiment of the wire saw housing; FIG. 117 is a rear elevational view thereof;

doors opened;

FIG. 45 is a front elevational view of a sixth embodiment of the wire saw housing;

FIG. 46 is a rear elevational view thereof:

FIG. 47 is a top plan view thereof;

FIG. 48 is a bottom plan view thereof;

FIG. 49 is a right side elevational view thereof;

FIG. 50 is a left side elevational view thereof;

FIG. 51 is a front perspective view thereof;

FIG. 52 is a rear perspective view thereof; and

FIG. 53 is a front perspective view thereof with the front doors opened;

FIG. 54 is a front elevational view of a seventh embodiment of the wire saw housing;

FIG. 55 is a rear elevational view thereof;

FIG. 56 is a top plan view thereof;

FIG. 57 is a bottom plan view thereof;

FIG. 58 is a right side elevational view thereof;

FIG. 59 is a left side elevational view thereof;

FIG. 60 is a front perspective view thereof;

FIG. 61 is a rear perspective view thereof; and

FIG. 62 is a front perspective view thereof with the front

doors opened;

FIG. 63 is a front elevational view of a eighth embodiment of the wire saw housing;

FIG. 64 is a rear elevational view thereof;

FIG. 65 is a top plan view thereof;

FIG. 66 is a bottom plan view thereof;

FIG. 67 is a right side elvational view thereof;

FIG. 68 is a left side elevational view thereof;

FIG. 69 is a front perspective view thereof;

FIG. 70 is a rear perspective view thereof; and

FIG. 71 is a front perspective view thereof with the front doors opened;

FIG. 72 is a front elevational view of a ninth embodiment of the wire saw housing;

FIG. 73 is a rear elevational view thereof;

FIG. 74 is a top plan view thereof;

FIG. 75 is a bottom plan view thereof;

FIG. 76 is a right side elvational view thereof, the left side

elevational view being a mirror image of FIG. 76;

FIG. 77 is a front perspective view thereof;

FIG. 78 is a rear perspective view thereof; and

FIG. 79 is a front perspective view thereof with the front doors opened; FIG. 80 is a front elevational view of a tenth embodiment of the wire saw housing;

FIG. 118 is a top plan view thereof;

FIG. 119 is a bottom plan view thereof;

FIG. 120 is a right side elevational view thereof;

FIG. 121 is a left side elevational view thereof;

FIG. 122 is a front perspective view thereof;

FIG. 123 is a rear perspective view thereof; and,

FIG. 124 is a front perspective view thereof with the front doors opened.

#### 1 Claim, 84 Drawing Sheets

## U.S. Patent Jan. 5, 1999 Sheet 1 of 84 Des. 403,685









## U.S. Patent Jan. 5, 1999 Sheet 2 of 84 Des. 403,685





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### U.S. Patent

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#### Jan. 5, 1999

#### Sheet 3 of 84

## Des. 403,685

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Fig. 6



## U.S. Patent

#### Jan. 5, 1999

#### Sheet 4 of 84

## Des. 403,685

Fig. 7

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## U.S. Patent

Jan. 5, 1999

#### Sheet 5 of 84

## Des. 403,685

## Fig. 8



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## U.S. Patent Jan. 5, 1999 Sheet 6 of 84 Des. 403,685



## U.S. Patent Jan. 5, 1999 Sheet 7 of 84 Des. 403,685

# Fig. 10 Fig. 11





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# U.S. Patent Jan. 5, 1999 Sheet 8 of 84 Des. 403,685

# Fig. 12







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## U.S. Patent Jan. 5, 1999 Sheet 9 of 84 Des. 403,685



Fig. 15



## U.S. Patent Jan. 5, 1999 Sheet 10 of 84 Des. 403,685

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## U.S. Patent Jan. 5, 1999 Sheet 11 of 84 Des. 403,685



## U.S. Patent Jan. 5, 1999 Sheet 12 of 84 Des. 403,685



## U.S. Patent Jan. 5, 1999 Sheet 13 of 84 Des. 403,685

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Fig. 20









## U.S. Patent Jan. 5, 1999 Sheet 14 of 84 Des. 403,685

Fig. 21 Fig. 22





## U.S. Patent J

#### Jan. 5, 1999

#### **Sheet 15 of 84**

## Des. 403,685





Fig. 24



## U.S. Patent Jan. 5, 1999 Sheet 16 of 84 Des. 403,685

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## Fig. 25

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## U.S. Patent Jan. 5, 1999 Sheet 17 of 84 Des. 403,685



## U.S. Patent Jan. 5, 1999 Sheet 18 of 84 Des. 403,685



## U.S. Patent Jan. 5, 1999 Sheet 19 of 84 Des. 403,685



#### Des. 403,685 U.S. Patent Sheet 20 of 84 Jan. 5, 1999









## U.S. Patent Jan. 5, 1999 Sheet 22 of 84 Des. 403,685



## U.S. Patent Jan. 5, 1999 Sheet 23 of 84 Des. 403,685

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## U.S. Patent Jan. 5, 1999 Sheet 24 of 84 Des. 403,685

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## U.S. Patent Jan. 5, 1999 Sheet 25 of 84 Des. 403,685







## U.S. Patent Jan. 5, 1999 Sheet 26 of 84 Des. 403,685









## U.S. Patent Jan. 5, 1999 Sheet 27 of 84 Des. 403,685

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## U.S. Patent Jan. 5, 1999 Sheet 28 of 84 Des. 403,685



## U.S. Patent Jan. 5, 1999 Sheet 29 of 84 Des. 403,685

## Fig. 43

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## U.S. Patent Jan. 5, 1999 Sheet 30 of 84 Des. 403,685

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## U.S. Patent Jan. 5, 1999 Sheet 31 of 84 Des. 403,685





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## U.S. Patent Jan. 5, 1999 Sheet 32 of 84 Des. 403,685







# U.S. Patent Jan. 5, 1999 Sheet 33 of 84 Des. 403,685 Fig. 49





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## U.S. Patent Jan. 5, 1999 Sheet 34 of 84 Des. 403,685


#### U.S. Patent Jan. 5, 1999 Sheet 35 of 84 Des. 403,685

# Fig. 52

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#### U.S. Patent Jan. 5, 1999 Sheet 36 of 84 Des. 403,685

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#### U.S. Patent Jan. 5, 1999 Sheet 37 of 84 Des. 403,685

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#### U.S. Patent Jan. 5, 1999 Sheet 38 of 84 Des. 403,685



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#### U.S. Patent

Jan. 5, 1999

#### Sheet 39 of 84

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#### Des. 403,685







#### U.S. Patent Jan. 5, 1999 Sheet 40 of 84 Des. 403,685

#### Fig. 60

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#### U.S. Patent Jan. 5, 1999 Sheet 41 of 84 Des. 403,685



#### **U.S. Patent**

Jan. 5, 1999

#### Sheet 42 of 84

#### Des. 403,685



#### U.S. Patent Jan. 5, 1999 Sheet 43 of 84 Des. 403,685

.

Fig. 63

Fig. 64







#### Des. 403,685 Sheet 44 of 84 U.S. Patent Jan. 5, 1999

66 Fig. 65 Fig.





#### U.S. Patent Jan. 5, 1999 Sheet 45 of 84 Des. 403,685

#### Fig. 67









#### Des. 403,685 Sheet 46 of 84 U.S. Patent Jan. 5, 1999

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#### Fig. 69

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#### U.S. Patent Jan. 5, 1999 Sheet 47 of 84 Des. 403,685

#### Fig. 70



#### U.S. Patent Jan. 5, 1999 Sheet 48 of 84 Des. 403,685

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#### U.S. Patent Jan. 5, 1999 Sheet 49 of 84 Des. 403,685









#### U.S. Patent Jan. 5, 1999 Sheet 50 of 84 Des. 403,685





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# U.S. Patent Jan. 5, 1999 Sheet 51 of 84 Des. 403,685

Fig. 76





#### U.S. Patent Jan. 5, 1999 Sheet 52 of 84 Des. 403,685

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#### U.S. Patent Jan. 5, 1999 Sheet 53 of 84 Des. 403,685



#### U.S. Patent Jan. 5, 1999 Sheet 54 of 84 Des. 403,685

Fig. 79



#### U.S. Patent Jan. 5, 1999 Sheet 55 of 84 Des. 403,685

#### Fig. 80







#### Des. 403,685 U.S. Patent Sheet 56 of 84 Jan. 5, 1999







#### **U.S. Patent** Jan. 5, 1999

Sheet 57 of 84

#### Des. 403,685

Fig. 84





#### U.S. Patent Jan. 5, 1999 Sheet 58 of 84 Des. 403,685

# Fig. 86



#### U.S. Patent Jan. 5, 1999 Sheet 59 of 84 Des. 403,685

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#### U.S. Patent Jan. 5, 1999 Sheet 60 of 84 Des. 403,685

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#### U.S. Patent Jan. 5, 1999 Sheet 61 of 84 Des. 403,685

# Fig. 89





#### U.S. Patent Jan. 5, 1999 Sheet 62 of 84 Des. 403,685

Fig. 91

Fig. 92





#### U.S. Patent Jan. 5, 1999 Sheet 63 of 84 Des. 403,685









#### U.S. Patent Jan. 5, 1999 Sheet 64 of 84 Des. 403,685



#### U.S. Patent Jan. 5, 1999 Sheet 65 of 84 Des. 403,685

#### Fig. 96



#### U.S. Patent Jan. 5, 1999 Sheet 66 of 84 Des. 403,685

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#### U.S. Patent Jan. 5, 1999 Sheet 67 of 84 Des. 403,685

# Fig. 98 Fig. 99







#### U.S. Patent Jan. 5, 1999 Sheet 68 of 84 Des. 403,685







# U.S. Patent Jan. 5, 1999 Sheet 69 of 84 Des. 403,685 Fig. 102



Fig. 103



#### U.S. Patent Jan. 5, 1999 Sheet 70 of 84 Des. 403,685

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## U.S. Patent Jan. 5, 1999 Sheet 71 of 84 Des. 403,685

# Fig. 105





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### U.S. Patent Jan. 5, 1999 Sheet 72 of 84 Des. 403,685

# Fig. 106

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## U.S. Patent Jan. 5, 1999 Sheet 73 of 84 Des. 403,685





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#### U.S. Patent Jan. 5, 1999 Sheet 74 of 84 Des. 403,685





#### U.S. Patent Jan. 5, 1999 Sheet 75 of 84 Des. 403,685

## Fig. 111





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### U.S. Patent Jan. 5, 1999 Sheet 76 of 84 Des. 403,685



### U.S. Patent Jan. 5, 1999 Sheet 77 of 84 Des. 403,685



#### U.S. Patent Jan. 5, 1999 Sheet 78 of 84 Des. 403,685

# Fig. 115

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### U.S. Patent Jan. 5, 1999 Sheet 79 of 84 Des. 403,685





#### U.S. Patent Jan. 5, 1999 Sheet 80 of 84 Des. 403,685

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#### **U.S. Patent**

#### Jan. 5, 1999 Sheet 81 of 84

#### Des. 403,685





### U.S. Patent Jan. 5, 1999 Sheet 82 of 84 Des. 403,685

# Fig. 122



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### U.S. Patent Jan. 5, 1999 Sheet 83 of 84 Des. 403,685



#### **U.S. Patent** Jan. 5, 1999 Sheet 84 of 84

# Fig. 124

Des. 403,685

