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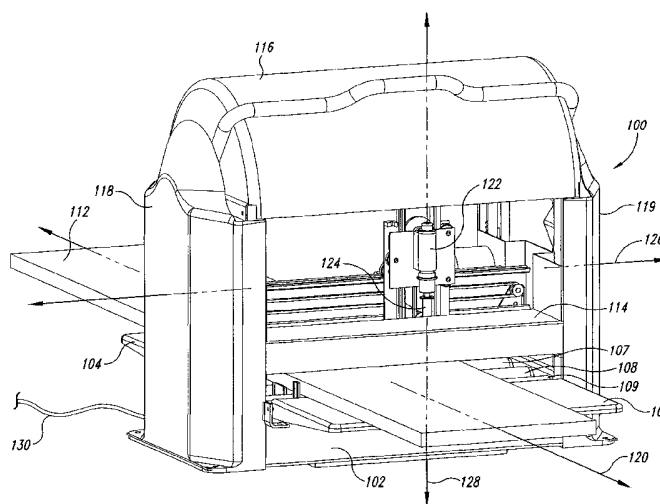
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 - (71) Applicant: **LHR TECHNOLOGIES** [US/US]; 3906 Sunset Meadows, Pearland, TX 77581 (US).
 - (72) Inventors: **LOVCHIK, Christopher, Scott**; 3906 Sunset Meadows, Pearland, TX 77581 (US). **JOCHIM, James, David**; 18219 Caprice Lane, Nassau Bay, TX 77058 (US). **LAWLER, Dennis, Girard**; 2256 Gemini Street, Houston, TX 77058 (US).
 - (74) Agent: **ROZMAN, Mark, J.**; Trop, Pruner & Hu, P.C., 8554 Katy Freeway, Ste. 100, Houston, TX 77024 (US).
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(54) Title: PROCESSOR-CONTROLLED CARVING AND MULTI-PURPOSE SHAPING DEVICE



(57) Abstract: One embodiment of the present invention is a compact, low-cost, lightweight, versatile and easy-to-operate, processor-controlled carving and multi-purpose shaping device ("PCCMPS machine"). The PCCMPS (100) machine that represents one embodiment of the present invention is configured, in part, similarly to common, commercially available portable woods planers and ubiquitous laser and ink-jet computer printers, with work pieces (112) fed into the PCCMPS machine in a horizontal direction. The PCCMPS machine includes a motor-powered cutting head (114) that can power detachable bits to drill, cut, shape, and rout a work piece under processor and computer control. The cutting head may be translated, under processor control, back and forth across the surface of the work piece in a direction perpendicular to the direction in which the work piece is fed into the PCCMPS machine and moved by motor powered rollers (107-109).



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : B23Q 15/00; BG27C 5/00; G06F 7/00
US CL : 144/356, 135.2, 82 700/179,218

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)

U.S. : Please See Extra Sheet.

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 practicable, search terms used)

EAST

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X ---- Y	US 4,621,407 A (SUZUKI) 11 NOVEMBER 1986 (11-11-86), SEE FIGURE 3.	1-3,8,12,17 ----- 4-7, 9-11, 13-16, 18-20
A	US 5,340,247 A (CUNEO, ET AL) 23 AUGUST 1994 (23-08-94), SEE THE ENTIRE DOCUMENT.	1
Y	US 5,833,407 A (SENDA) 10 NOVEMBER 1998 (10-11-98), SEE FIGURE 7.	9
Y	US 67,019,554 (HONG) 01 FEBRUARY 2000 (01-02-00), SEE THE ENTIRE DOCUMENT.	2-14, 17-20
A	US 6,347,259 B1 (GOLDENBURG, ET AL) 12 FEBRUARY 2002 (12-02-02)	1-7, 17, 19, 20

Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents:	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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"O" document referring to an oral disclosure, use, exhibition or other means		
"P" document published prior to the international filing date but later than the priority date claimed		

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Box PCT
Washington, D.C. 20231

Authorized officer

W. DONALD BRAY

Sheila H. Veney
Patent Specialist
Tech. Center 3700

Facsimile No. (703) 305-3230

Telephone No. (703) 308-1148

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B. FIELDS SEARCHED

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29/26a, 27c; 144/3.1, 134.1, 135.2, 136, 137, 356, 357, 359, 371, 382; 409/80, 131, 132, 144, 188, 195, 230; 364/474.17,
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