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(12) United States Design Patent

Klassen

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(54) **ROBOTIC ARM**

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(**) Term: **15 Years**

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(51) **LOC (11) Cl.** **15-99**

(52) **U.S. Cl.**
USPC **D15/199**

(58) **Field of Classification Search**
USPC D15/199; D21/578–583, 621, 622
CPC B25J 5/007; B60B 19/006; B62D 57/024; H01F 7/0221; Y10S 901/01
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D267,883	S	*	2/1983	Susnjara	D15/122
D287,368	S	*	12/1986	Shibayama	D15/122
D293,449	S	*	12/1987	Kaufmann	D15/122
4,818,174	A	*	4/1989	Arpiarian	B25J 19/025 338/15
D307,282	S	*	4/1990	Suica	D15/199
D636,803	S	*	4/2011	Nakagiri	D15/199
D642,352	S	*	7/2011	Chen	D34/28
D690,753	S	*	10/2013	Liu	D15/199
D712,447	S	*	9/2014	He	D15/199
9,126,332	B2		9/2015	Caron L'Ecuyer et al.	
D749,223	S	*	2/2016	Vargas	D24/185
D768,219	S	*	10/2016	Kraus	D15/199
D778,971	S	*	2/2017	Long	D15/199
D802,041	S	*	11/2017	He	D15/199

(Continued)

OTHER PUBLICATIONS

"Artistic Robot Arm," <http://www.pinterest.ca/a_essam/robots>, 1-page brochure, at least as early as Oct. 2016.

(Continued)

Primary Examiner — Patricia A Palasik

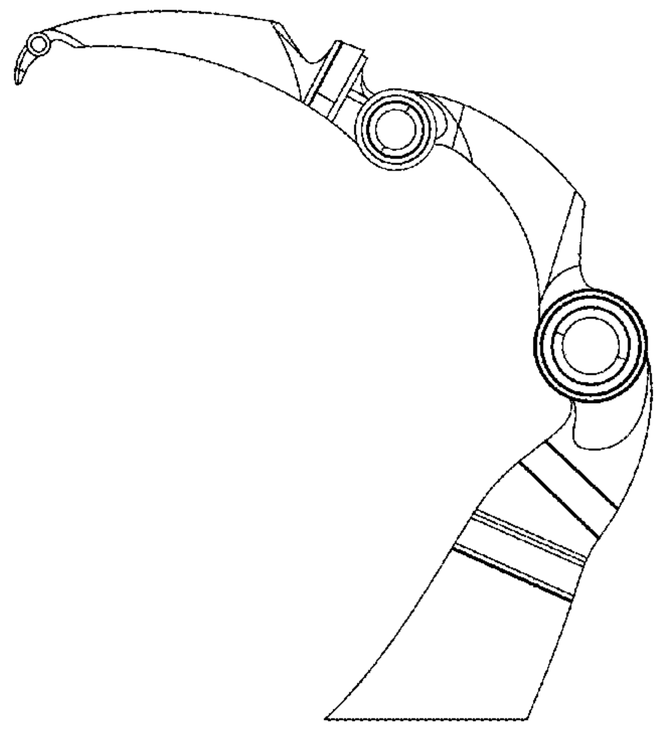
(57) **CLAIM**

The ornamental design for a robotic arm, as shown and described.

DESCRIPTION

FIG. **1** is a right side view of a robotic arm in accordance with the present design;
FIG. **2** is a right side view of the robotic arm shown in FIG. **1** in a first moved position;
FIG. **3** is a top perspective view of the robotic arm shown in FIG. **1**, in a second moved position;
FIG. **4** is a right-front perspective view of the robotic arm shown in FIG. **1**, in the second moved position;
FIG. **5** is a right side view of the robotic arm shown in FIG. **1**, in a third moved position;
FIG. **6** is a right back perspective view of the robotic arm shown in FIG. **1**, in a fourth moved position; and,
FIG. **7** is a top back perspective view of the robotic arm shown in FIG. **1**, in a fourth moved position.

1 Claim, 7 Drawing Sheets



(56) **References Cited**

U.S. PATENT DOCUMENTS

2015/0257838	A1*	9/2015	Huet	A61B 17/16 606/80
2015/0258689	A1*	9/2015	Suzuki	B25J 9/1697 700/259
2015/0277426	A1*	10/2015	Ogata	B25J 9/1694 700/253
2015/0285721	A1*	10/2015	Watanabe	G01B 21/00 73/788
2015/0306770	A1*	10/2015	Mittal	B25J 5/007 700/255
2015/0379171	A1*	12/2015	Kuwahara	G06F 17/5009 703/13
2016/0081753	A1*	3/2016	Kostrzewski	A61B 34/25 606/130
2016/0229058	A1*	8/2016	Pinter	G06Q 50/22
2016/0263749	A1*	9/2016	Ogata	B25J 13/085
2016/0271803	A1*	9/2016	Stewart	B25J 11/0085
2016/0332303	A1*	11/2016	Kirihara	B25J 9/1653
2017/0348062	A1*	12/2017	Sweeney, II	A61B 34/32
2018/0021950	A1*	1/2018	Shimodaira	B25J 9/1633
2018/0071912	A1*	3/2018	Rouaud	B25J 9/102
2018/0078332	A1*	3/2018	Mozes	A61B 34/20
2018/0093133	A1*	4/2018	Decarlo	A61B 5/6895
2018/0104829	A1*	4/2018	Altman	B25J 19/005

OTHER PUBLICATIONS

"Atomic Art Robot Arm," <http://stuffuni.blogspot.ca/2013/02/robot-assignment.html>, 1-page brochure, at least as early as Oct. 2017.
"Darth Vader Robotic Arm," <http://www.gadgetreview.com/darth-vader-robotic-arm>, 1-page brochure, at least as early as Oct. 2015.
"Moley Robotic Chef Design Boom," <http://www.designboom.com/technology/moley-robotic-kitchen-chef-12-07-2015>; 1-page brochure, at least as early as Oct. 2017.
"Motor Joint Integrated Robot Arm," <http://www.robotshop.com/en/robot-arm-mover4-starter-set.html>, 1-page brochure, at least as early as Oct. 2017.
"Robot Arm," <http://alcalde.texasexes.org/robots/standard.html>, 1-page brochure, at least as early as Oct. 2017.
"Robotic Arm With Three Axis Wrist Rotation," <https://www.quora.com/What-are-the-restrictions-on-a-robotic-arm-in-order-to-mimic-human-arm-motions>, 1-page brochure, at least as early as Oct. 2015.
"Epson 3C: Compact 6 Axis Robots," Epson Robots, Carson, Calif., < http://robots.epson.com/product-detail/10>, 3-page brochure, at least as early as Oct. 2016.
"Robot Hardware Overview," Fetch Robotics: Fetch & Freight Blog, <http://docs.fetchrobotics.com/robot_hardware.html>, 11-page brochure, at least as early as Oct. 2016.

* cited by examiner

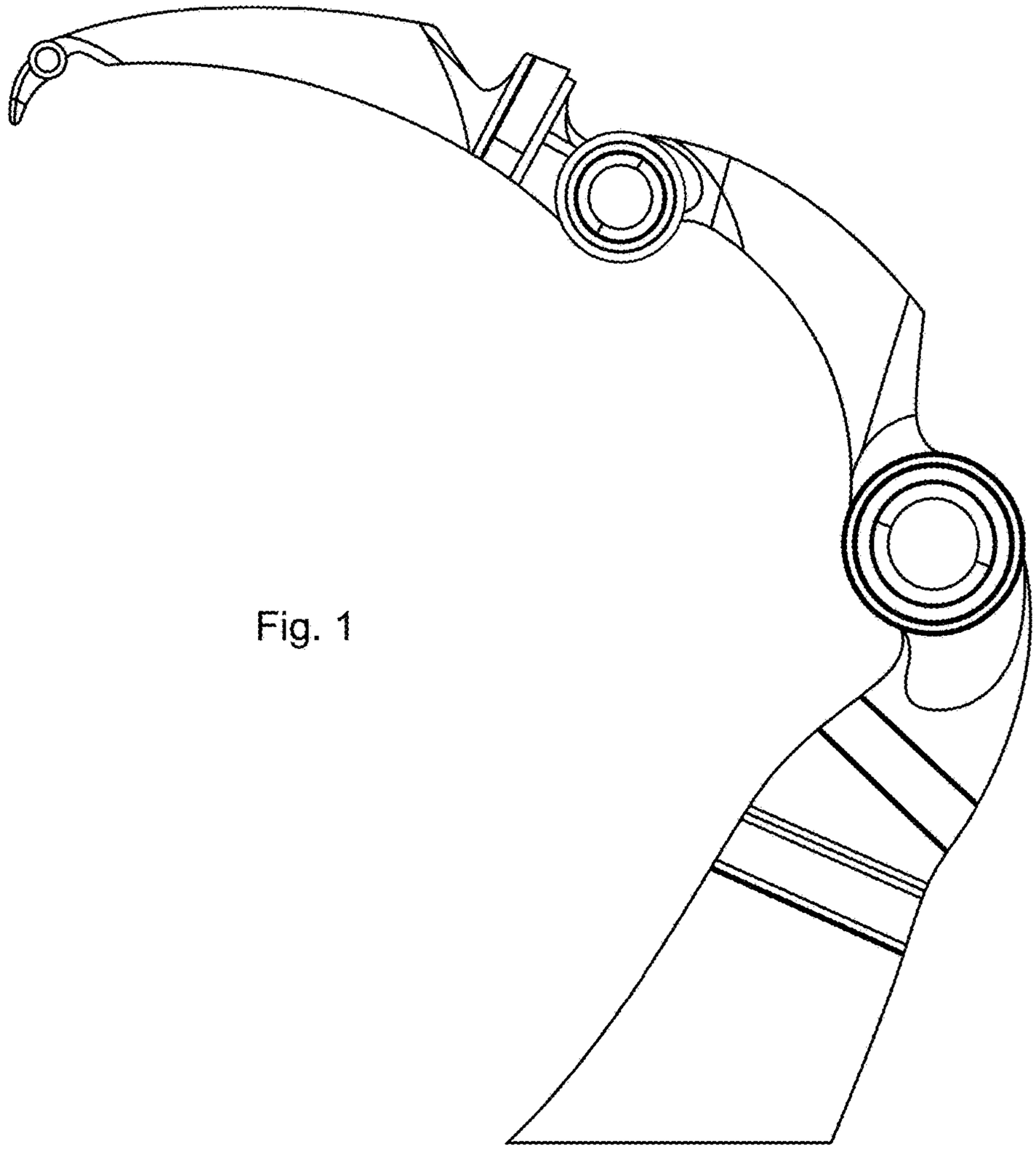
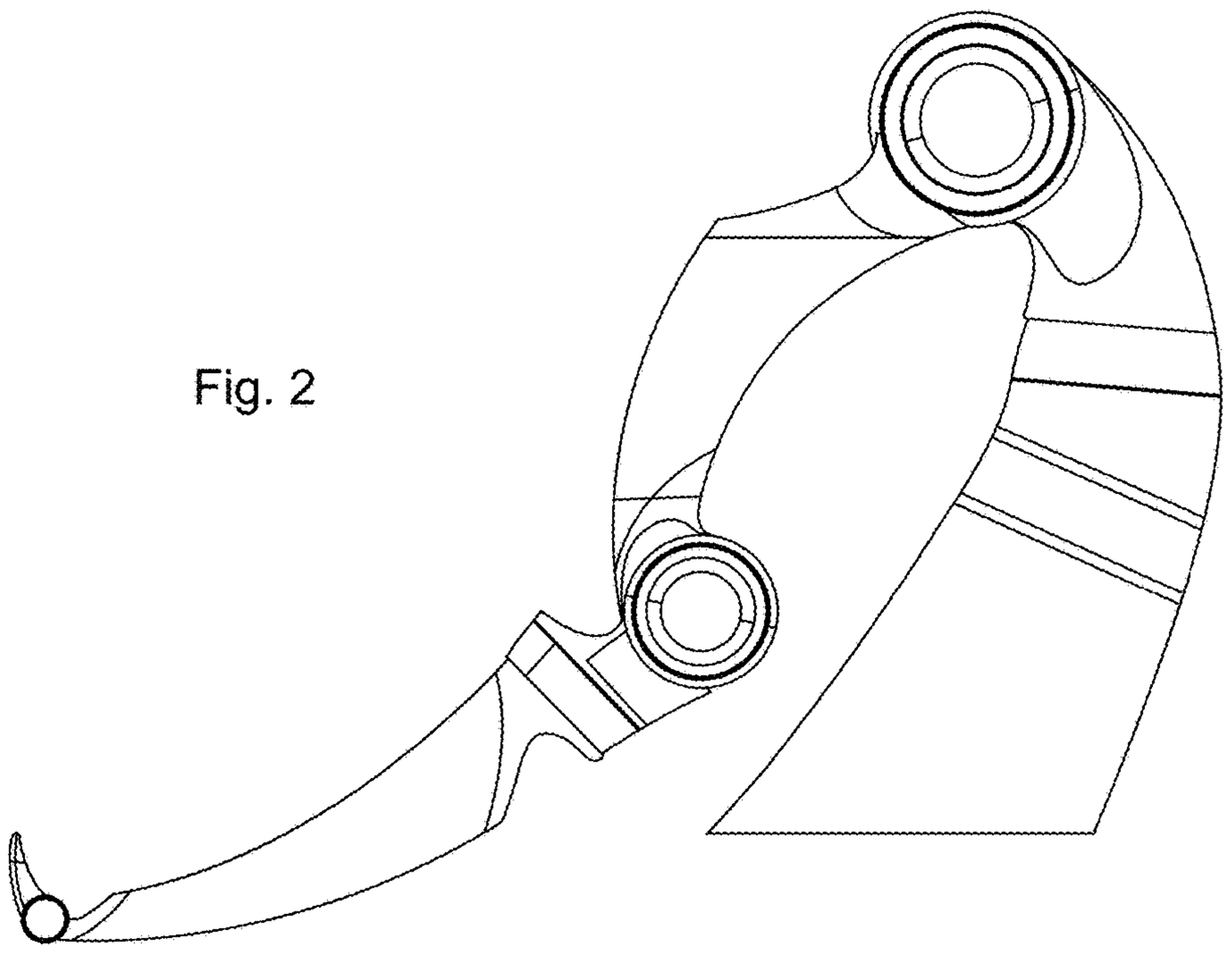


Fig. 1

Fig. 2



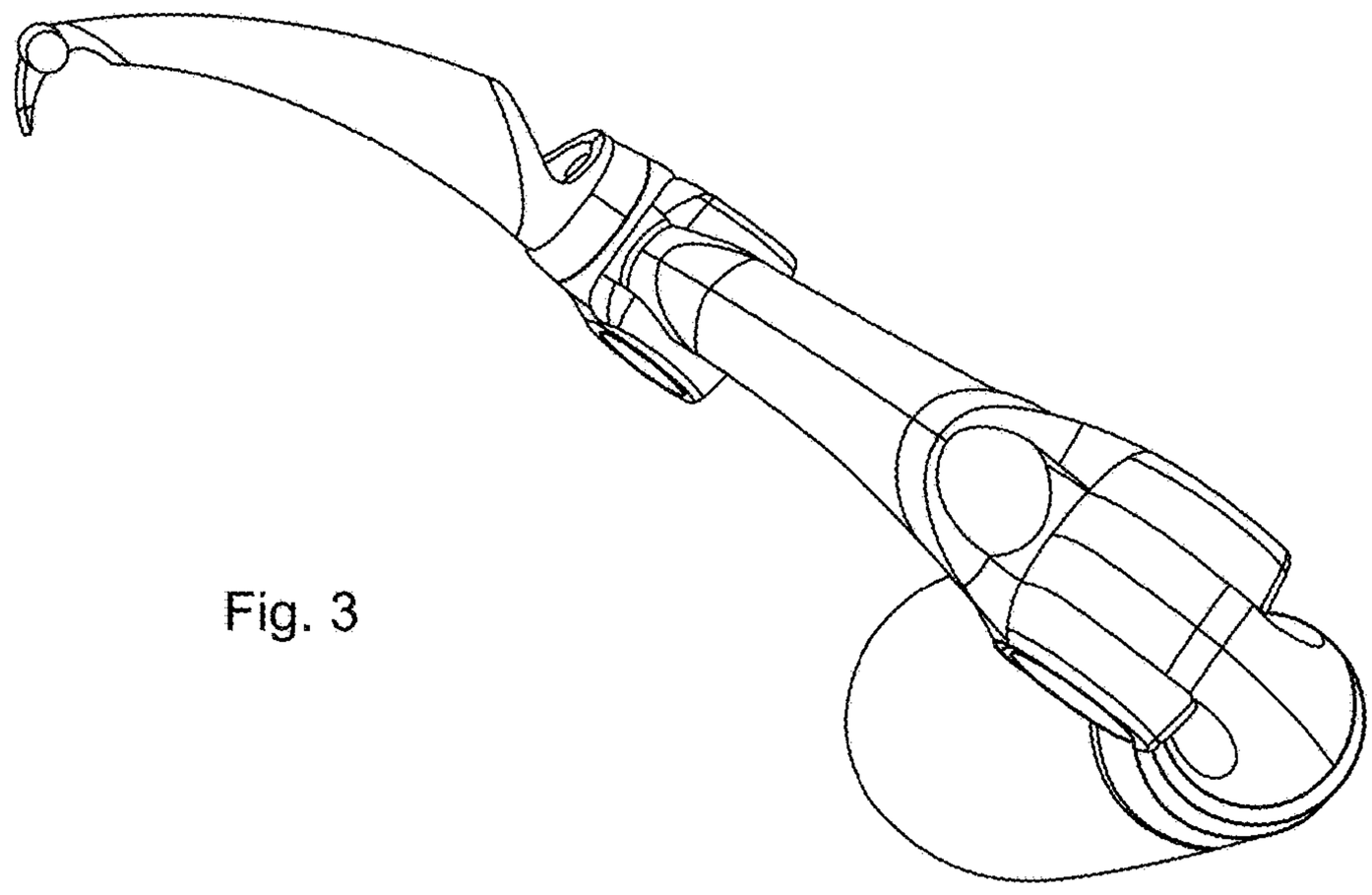


Fig. 3

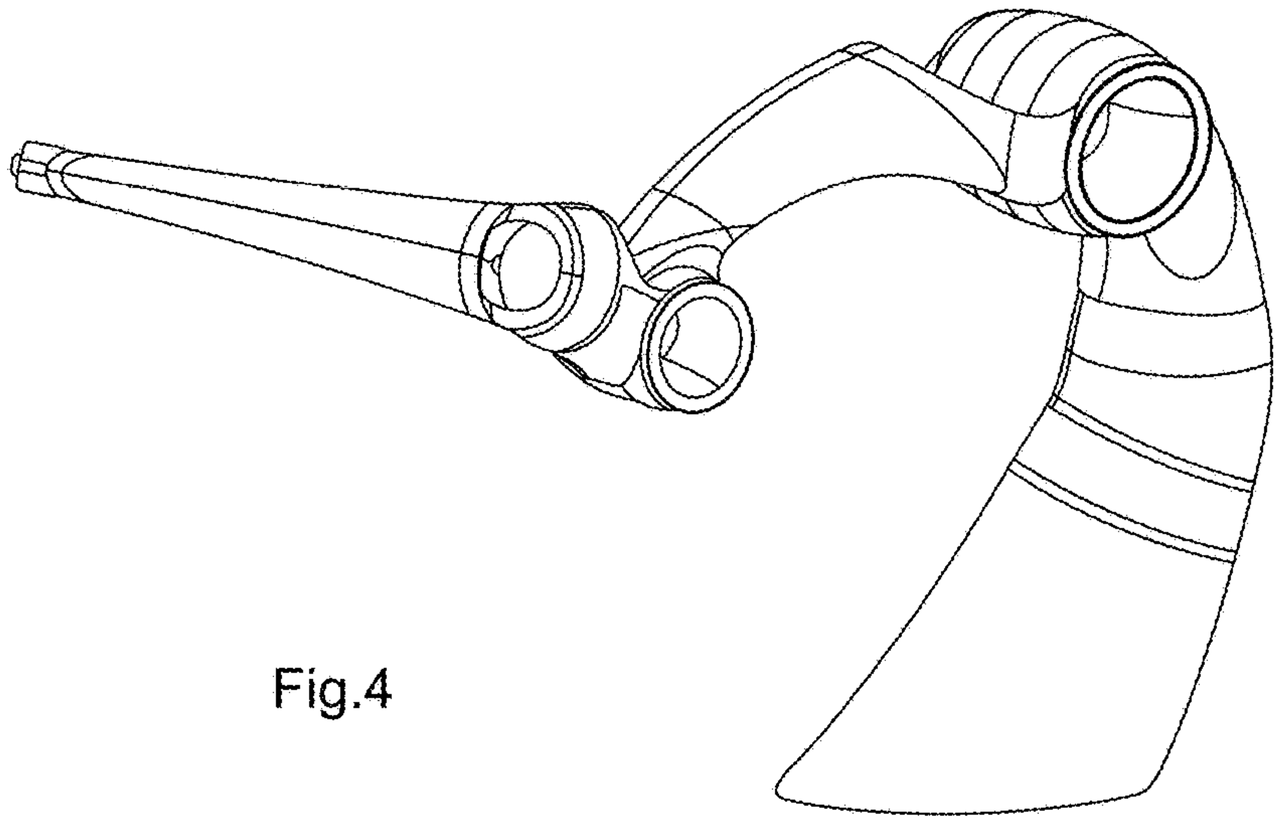


Fig.4

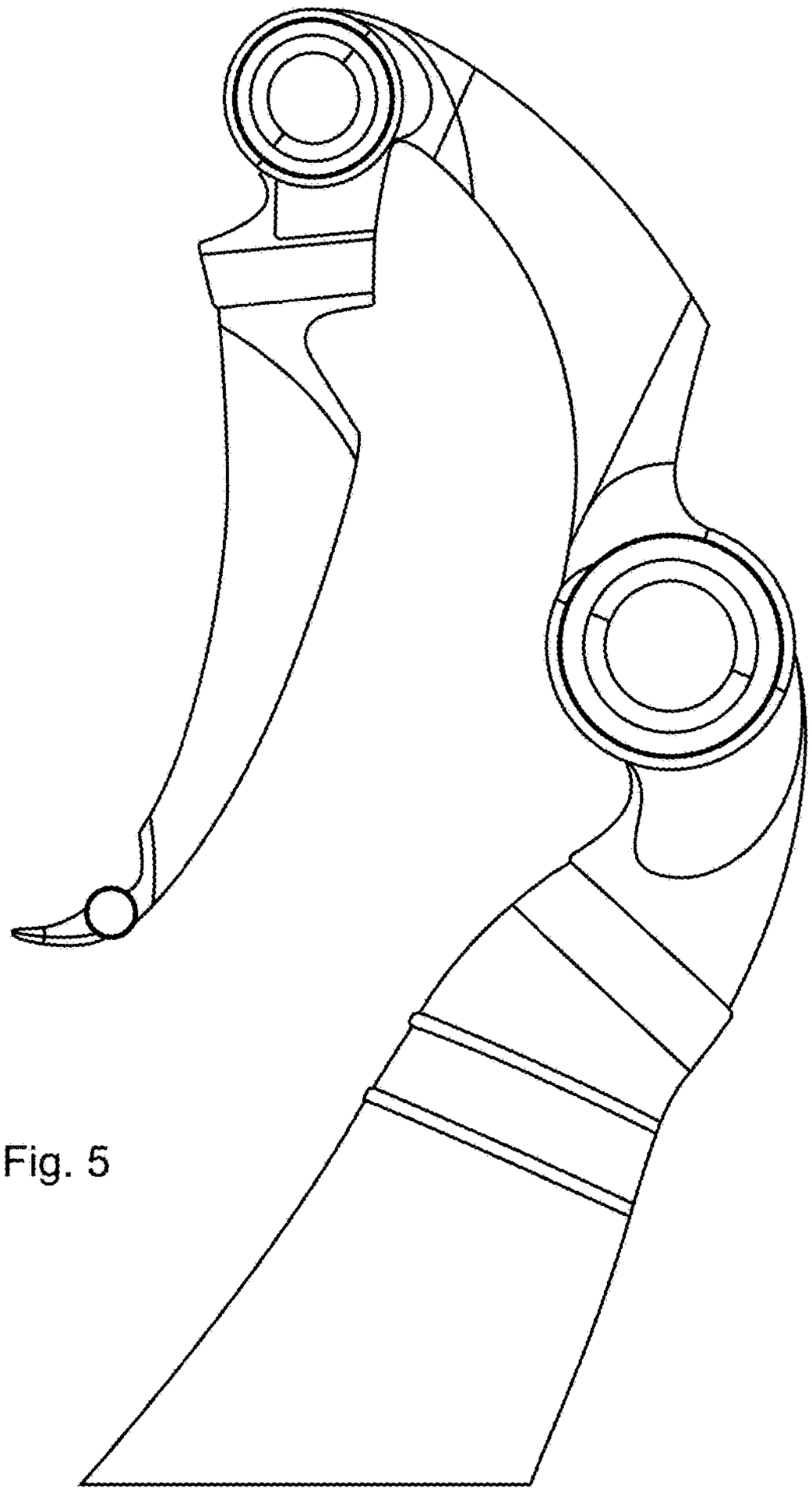
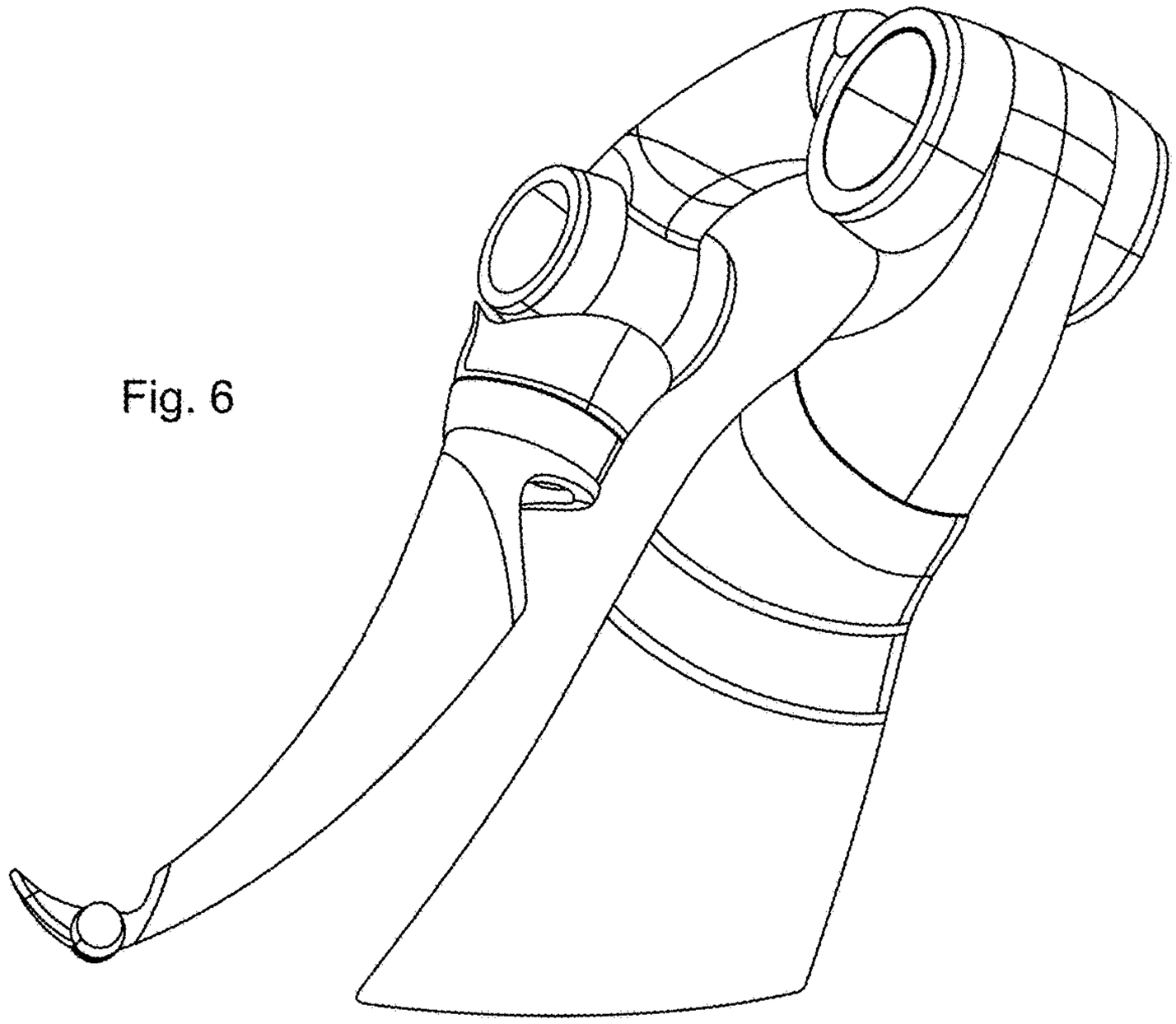


Fig. 5

Fig. 6



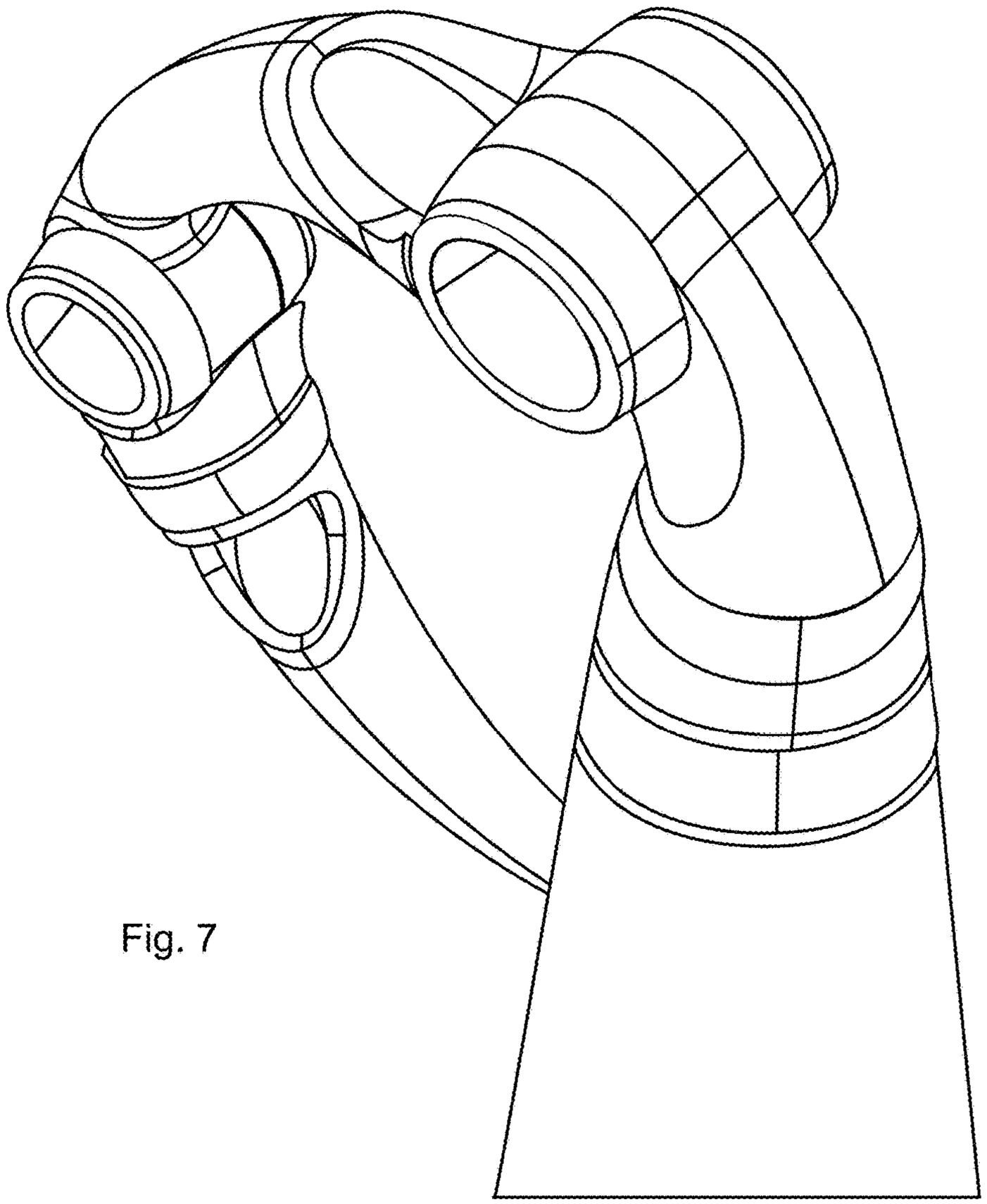


Fig. 7