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(12) **United States Design Patent**
Wixted

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(54) **EXTERNAL MEDICAL FIXATION CLAMP**

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

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(51) **LOC (13) Cl.** **24-02**

(52) **U.S. Cl.**
USPC **D24/143; D24/190**

(58) **Field of Classification Search**
USPC D8/72, 73, 394; D24/128, 135, 143, 155, D24/190
CPC A61B 5/4504; A61B 17/6466; A61B 17/6458; A61B 17/6441

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,736,629 A * 6/1973 Blake B25B 5/103
24/514

4,620,533 A 11/1986 Mears

D305,608 S * 1/1990 Hahn D8/71
5,741,252 A 4/1998 Mazzio et al.
5,921,985 A 7/1999 Ross, Jr. et al.
5,976,133 A * 11/1999 Kraus A61B 17/171
606/54
6,059,784 A * 5/2000 Perusek A61B 5/4504
606/102
6,080,153 A 6/2000 Mata et al.
6,277,069 B1 * 8/2001 Gray A61B 17/6466
600/234
D448,280 S * 9/2001 Bourgerie D8/382
6,565,564 B2 5/2003 Hoffman et al.

(Continued)

FOREIGN PATENT DOCUMENTS

CH 657899 A5 9/1986
EP 0883380 B1 8/2001

(Continued)

OTHER PUBLICATIONS

Beth Israel Deaconess Medical Center. Equipment Listing. No date specified. <https://www.bidmc.org/research/core-facilities/animal-metabolic-physiology-core/equipment-listing> (Year: 0).*

(Continued)

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(57) **CLAIM**

The ornamental design for an external medical fixation clamp, as shown and described.

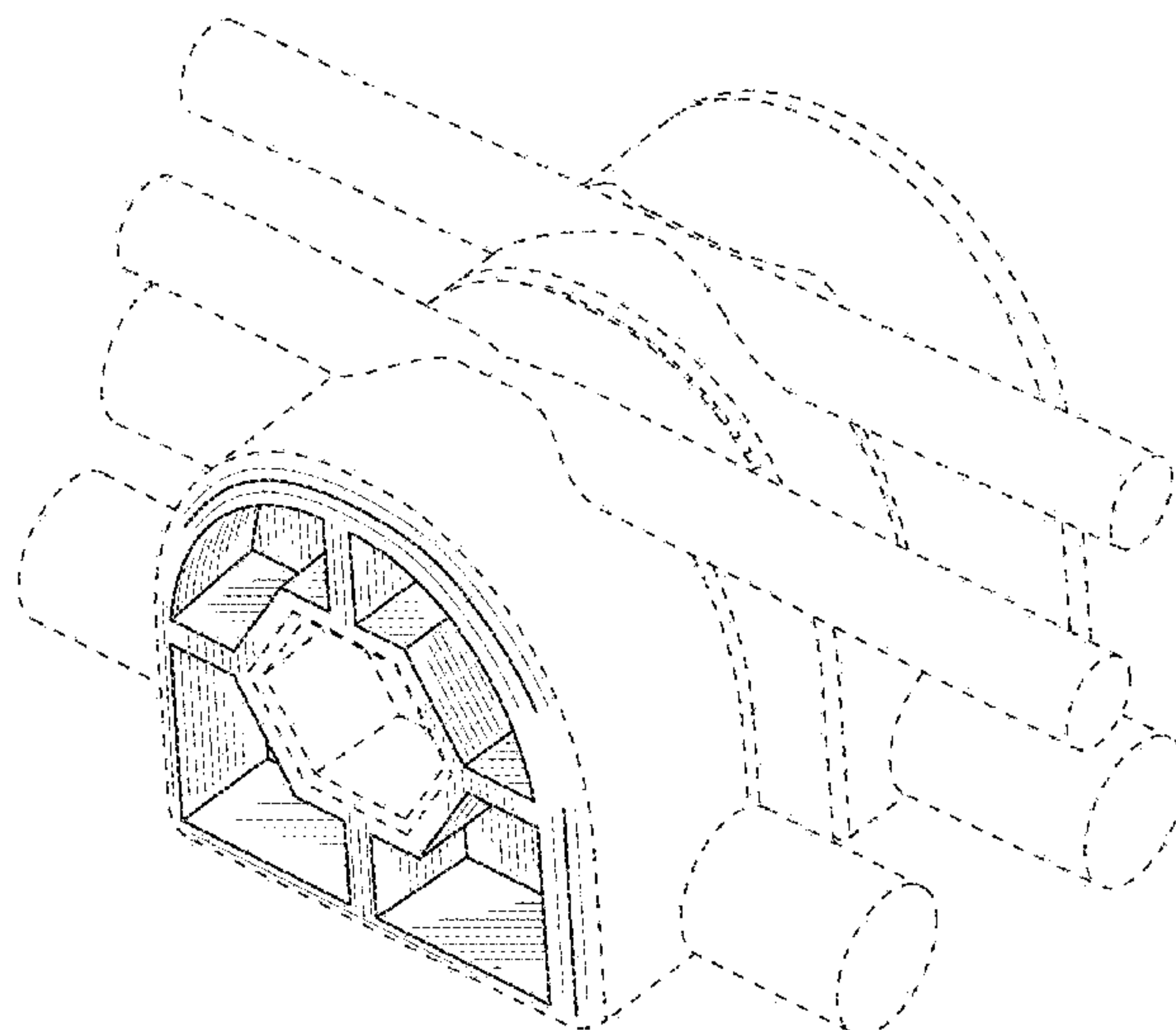
DESCRIPTION

2.1 : Perspective

2.2 : Top

In the reproductions, the broken lines show portions of an external medical fixation clamp that forms no part of the claim.

1 Claim, 2 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

7,048,735 B2 * 5/2006 Ferrante A61B 17/645
606/59

7,261,713 B2 8/2007 Langmaid et al.

7,491,008 B2 * 2/2009 Thomke A61B 17/645
403/316

7,762,308 B2 7/2010 Crawford et al.

7,801,613 B2 9/2010 Li et al.

7,806,623 B2 10/2010 Thomke et al.

7,875,030 B2 1/2011 Hoffmann-Clair et al.

D663,030 S 7/2012 Murner et al.

D679,013 S * 3/2013 Green D24/143

D682,426 S 5/2013 Dominik et al.

8,444,643 B2 5/2013 Thomke et al.

8,808,289 B2 8/2014 Busch et al.

8,821,491 B2 9/2014 Chreene et al.

D714,629 S * 10/2014 Irgens D8/394

8,992,579 B1 3/2015 Gustine et al.

9,155,561 B2 10/2015 Chang

9,757,573 B2 9/2017 Glynn et al.

9,883,890 B2 * 2/2018 Miller A61B 17/6466

D836,184 S * 12/2018 Lippka D23/262

D859,136 S * 9/2019 Tenander D8/394

D859,137 S * 9/2019 Tenander D8/394

D859,970 S * 9/2019 Tenander D8/394

D859,971 S * 9/2019 Tenander D8/394

D865,507 S * 11/2019 Tenander D8/394

10,702,308 B2 * 7/2020 Mullaney A61B 17/6466

10,945,765 B2 * 3/2021 Miller A61B 17/645

D926,019 S * 7/2021 Orikiwa E05B 73/00
D8/343

2001/0051806 A1 * 12/2001 Ballier A61B 17/645
606/54

2003/0187432 A1 10/2003 Johnson et al.

2006/0052781 A1 3/2006 Thomke et al.

2006/0177263 A1 8/2006 Thomke et al.

2007/0178005 A1 8/2007 Broadley et al.

2009/0198235 A1 * 8/2009 Steiner A61B 17/62
606/57

2009/0306661 A1 * 12/2009 Thomke A61B 17/645
606/54

2010/0298827 A1 11/2010 Cremer et al.

2012/0089142 A1 4/2012 Mullaney et al.

2013/0226179 A1 8/2013 Chreene et al.

2016/0303357 A1 * 10/2016 Simon, Jr. A61M 31/005

2016/0310167 A1 10/2016 Tepic

2016/0199098 A1 11/2016 Slagle

2017/0071633 A1 3/2017 Sanders et al.

2017/0281236 A1 * 10/2017 Mussolin A61B 17/645

2017/0303968 A1 10/2017 Kao et al.

2019/0350623 A1 * 11/2019 Wixted A61B 17/6466

FOREIGN PATENT DOCUMENTS

RU 2521839 C1 7/2014

WO 2009/042836 A1 4/2009

OTHER PUBLICATIONS

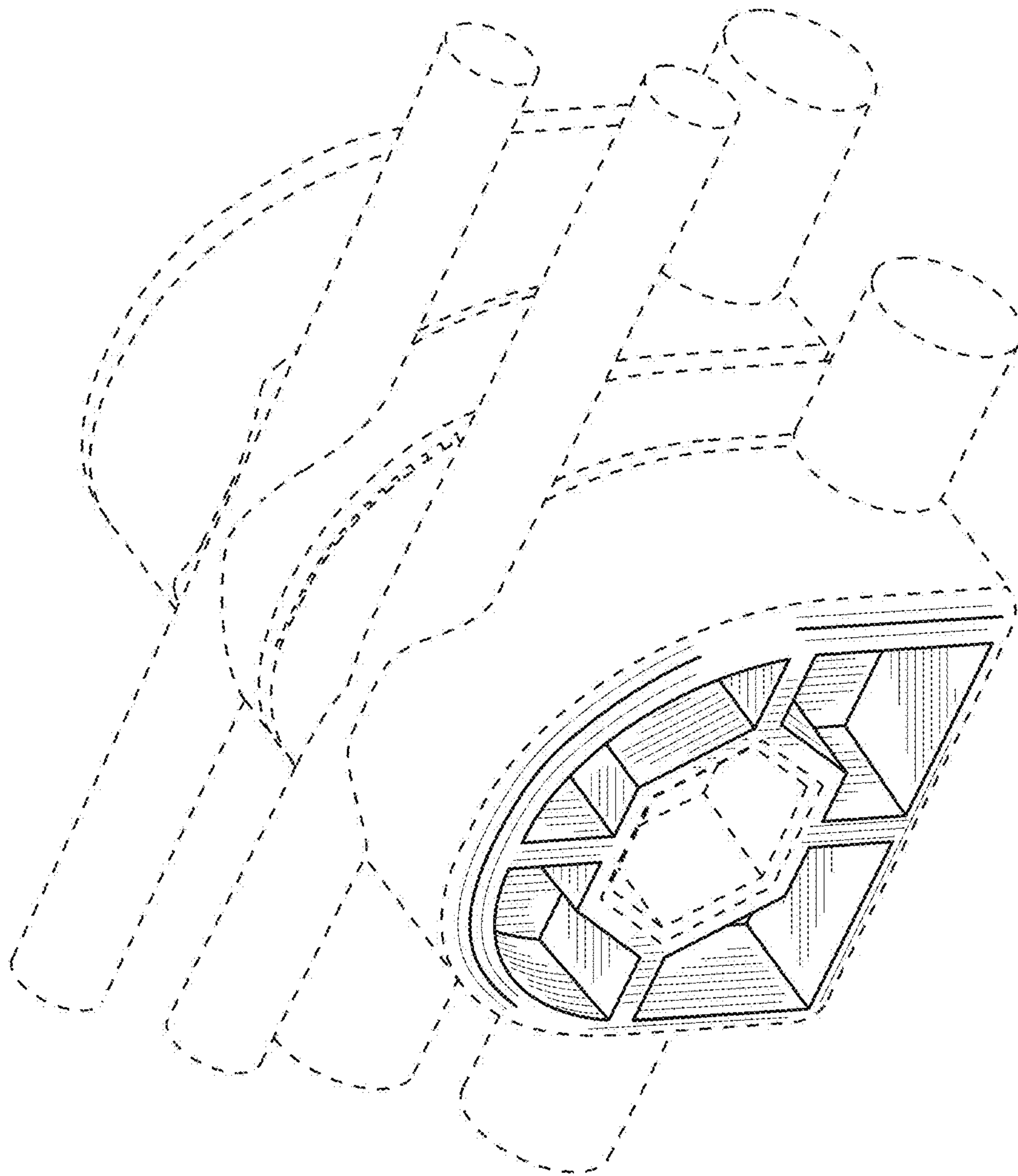
DePuy Synthes, Large and Medium External Fixators, Modular rod systems; Surgical Technique. Johnson & Johnson. 52 pages. Jul. 2016.

International Search Report and Written Opinion for Application No. PCT/US/2019/032962, dated Aug. 20, 2019, 15 pages.

U.S. Appl. No. 16/415,791, filed May 17, 2019, 2019-0350623, Published.

U.S. Appl. No. 29/691,690, filed May 17, 2019, Pending.

* cited by examiner



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