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(12) **United States Design Patent**
Welch et al.

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(54) **LIGHT EMITTER DEVICE**

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(73) Assignee: **Cree, Inc.**, Durham, NC (US)

(*) Notice: This patent is subject to a terminal disclaimer.

(**) Term: **14 Years**

(21) Appl. No.: **29/451,177**

(22) Filed: **Mar. 28, 2013**

Related U.S. Application Data

(63) Continuation-in-part of application No. 29/425,831, filed on Jun. 27, 2012, and a continuation-in-part of application No. 29/417,229, filed on Mar. 30, 2012, now Pat. No. Des. 686,824, and a continuation-in-part of application No. 29/412,168, filed on Jan. 31, 2012, and a continuation-in-part of application No. 29/407,084, filed on Nov. 22, 2011, now Pat. No. Des. 667,803, and a continuation-in-part of application No. 29/408,955, filed on Dec. 19, 2011, now Pat. No. Des. 676,395, and a continuation-in-part of application No. 29/380,387, filed on Dec. 3, 2010, now Pat. No. Des. 676,000, and a continuation of application No. 29/379,363, filed on Nov. 18, 2010, now Pat. No. Des. 649,061, and a continuation-in-part of application No. 13/140,558, filed on Aug. 30, 2011, now abandoned, and a continuation-in-part of application No. 13/028,972, filed on Feb. 16, 2011, now Pat. No. 8,564,000.

(51) **LOC (10) Cl.** **13-03**

(52) **U.S. Cl.**
USPC **D13/180**

(58) **Field of Classification Search**
USPC D13/180; D26/1; 257/79, 80, 81, 88,
257/89, 95, 98, 99, 100, E33.058; 313/483,
313/498, 500; 362/555, 800

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,855,194 A 8/1989 Wright
4,946,547 A 8/1990 Palmour

(Continued)

FOREIGN PATENT DOCUMENTS

CN ZL201230130915.6 10/2013
CN ZL201230652790.3 10/2013

(Continued)

OTHER PUBLICATIONS

Bridgelux Product Data Sheet—1 page.

(Continued)

Primary Examiner — Selina Sikder

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(57) **CLAIM**

The ornamental design for a light emitter device, as shown and described.

DESCRIPTION

FIG. 1 is a top perspective view of a light emitter device showing the design;

FIG. 2 is a top plan view thereof;

FIG. 3 is a side view thereof, the opposing and adjacent sides being mirror images of that shown;

FIG. 4 is a bottom plan view thereof;

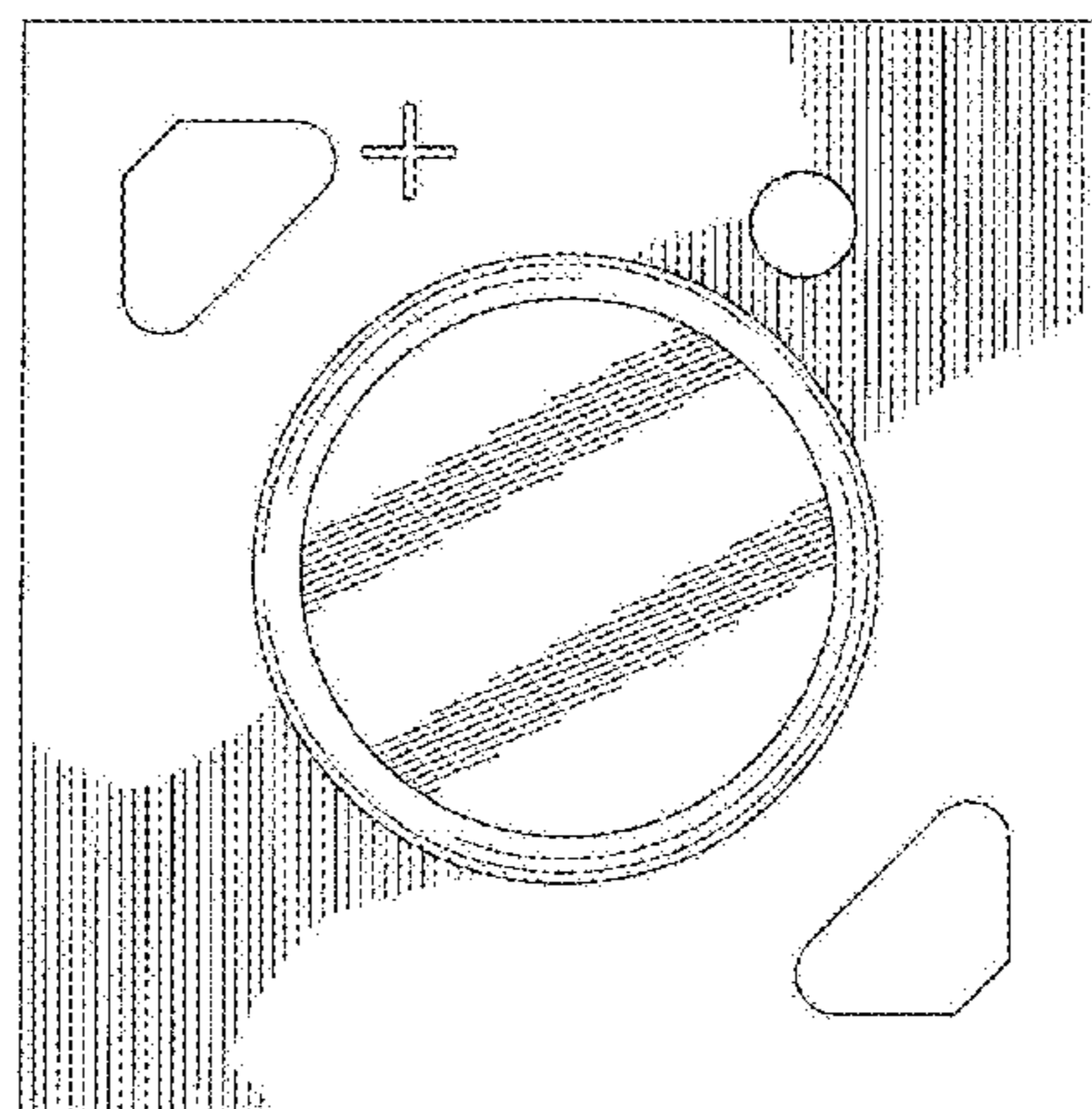
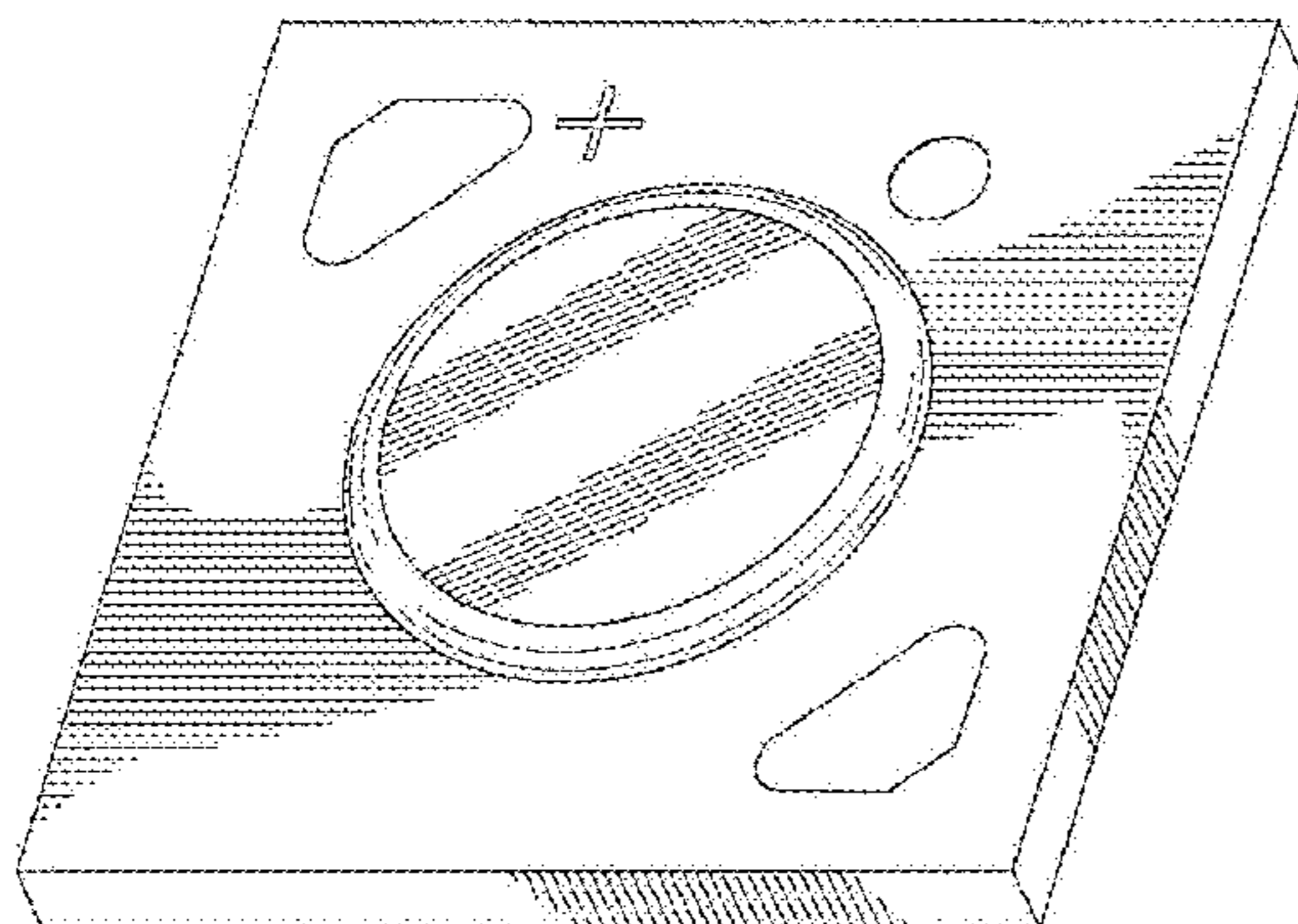
FIG. 5 is a top perspective view of a second light emitter device showing the design;

FIG. 6 is a top plan view thereof;

FIG. 7 is a side view thereof, the opposing and adjacent sides being mirror images of that shown; and,

FIG. 8 is a bottom plan view thereof. The broken lines are for illustrative purposes only and form no part of the claimed design.

1 Claim, 8 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

5,200,022 A 4/1993 Kong
 5,210,051 A 5/1993 Carter, Jr. et al.
 RE34,861 E 2/1995 Davis et al.
 5,393,993 A 2/1995 Edmond et al.
 5,523,589 A 6/1996 Edmond et al.
 6,093,053 A 7/2000 Horioka et al.
 6,548,832 B1 4/2003 Sakamoto et al.
 6,909,051 B2 6/2005 Noble
 7,055,987 B2 6/2006 Stauffert
 D528,672 S 9/2006 Nagai
 D541,761 S 5/2007 Saito et al.
 7,224,000 B2 5/2007 Aanegola et al.
 D570,506 S 6/2008 Uemoto
 D570,797 S 6/2008 Song
 D573,553 S * 7/2008 Uemoto et al. D13/180
 D573,731 S 7/2008 Uemoto
 D576,576 S * 9/2008 Shida et al. D13/180
 7,479,660 B2 * 1/2009 Kobilke 257/89
 7,482,636 B2 1/2009 Murayama et al.
 D586,303 S 2/2009 Fuwa et al.
 D589,470 S 3/2009 Chen
 D591,248 S 4/2009 Imai et al.
 D592,615 S 5/2009 Imai et al.
 D593,043 S * 5/2009 Song D13/180
 D602,451 S 10/2009 Gielen
 D603,813 S 11/2009 Nishimura et al.
 D607,420 S * 1/2010 Imai et al. D13/180
 D615,051 S 5/2010 Chen et al.
 D615,052 S * 5/2010 Imai et al. D13/180
 D618,635 S * 6/2010 Imai et al. D13/180
 7,780,313 B2 8/2010 Lam et al.
 7,825,578 B2 11/2010 Takashima et al.
 D630,171 S 1/2011 Hsieh
 7,872,418 B2 * 1/2011 Hata et al. 313/512
 D636,899 S 4/2011 Shibahara
 D637,564 S * 5/2011 Tseng et al. D13/180
 D640,997 S 7/2011 Imai et al.
 7,994,518 B2 8/2011 Wang et al.
 D645,417 S 9/2011 Imai et al.
 8,044,418 B2 10/2011 Loh et al.
 8,058,088 B2 11/2011 Cannon
 D650,760 S * 12/2011 Hussell et al. D13/180
 8,119,534 B2 * 2/2012 Tanaka et al. 438/734
 D658,601 S 5/2012 Egawa et al.
 D658,602 S 5/2012 Egawa et al.
 D658,603 S * 5/2012 Egawa et al. D13/180
 D667,803 S * 9/2012 Hussell et al. D13/180
 D669,041 S * 10/2012 Imai et al. D13/180
 D676,000 S * 2/2013 Hussell et al. D13/180
 D676,395 S * 2/2013 Hussell et al. D13/180
 D683,708 S * 6/2013 Sasano et al. D13/180
 8,455,908 B2 6/2013 Welch et al.
 D689,451 S * 9/2013 Shimonishi et al. D13/180
 8,564,000 B2 10/2013 Hussell
 8,575,639 B2 11/2013 Hussell
 8,624,271 B2 1/2014 Reiherzer
 2004/0196663 A1 * 10/2004 Ishida et al. 362/539
 2005/0264172 A1 12/2005 Wojnarowski et al.
 2006/0139595 A1 * 6/2006 Koenen et al. 355/55
 2006/0147746 A1 7/2006 Wakako et al.
 2006/0186418 A1 8/2006 Edmond et al.
 2007/0018295 A1 * 1/2007 Kim et al. 257/678
 2007/0029569 A1 2/2007 Andrews
 2007/0158668 A1 7/2007 Tarsa
 2007/0194336 A1 8/2007 Shin et al.
 2007/0241345 A1 10/2007 Huang
 2007/0246730 A1 10/2007 Oishi et al.
 2008/0054279 A1 3/2008 Hussell et al.
 2008/0054284 A1 3/2008 Hussell et al.
 2008/0054286 A1 3/2008 Loh et al.
 2008/0089072 A1 4/2008 Kim et al.
 2008/0106723 A1 5/2008 Hoogendam et al.
 2008/0173884 A1 7/2008 Chitnis
 2008/0179611 A1 7/2008 Chitnis
 2008/0191222 A1 8/2008 Lee

2008/0224166 A1 9/2008 Glovatsky et al.
 2008/0239318 A1 * 10/2008 Den Boef et al. 356/369
 2008/0258130 A1 10/2008 Bergmann
 2009/0023323 A1 1/2009 Lin et al.
 2009/0122514 A1 * 5/2009 Yoon et al. 362/84
 2009/0239409 A1 9/2009 Bishop
 2009/0261374 A1 10/2009 Hayashi
 2009/0289169 A1 11/2009 Yang et al.
 2009/0315061 A1 12/2009 Andrews
 2010/0078664 A1 4/2010 Helbing
 2010/0096642 A1 * 4/2010 Chang et al. 257/88
 2010/0139836 A1 * 6/2010 Horikoshi 156/64
 2010/0141182 A1 6/2010 Shi
 2010/0155763 A1 6/2010 Donofrio
 2010/0193822 A1 8/2010 Inobe et al.
 2010/0253248 A1 10/2010 Shi
 2010/0270567 A1 10/2010 Emerson et al.
 2010/0320483 A1 12/2010 Kadotani et al.
 2011/0013400 A1 1/2011 Kanno et al.
 2011/0068674 A1 3/2011 Takenaka et al.
 2011/0116275 A1 5/2011 Sheek
 2011/0121323 A1 * 5/2011 Wu et al. 257/88
 2011/0127912 A1 * 6/2011 Lee et al. 315/32
 2011/0128730 A1 6/2011 Chiu
 2011/0291151 A1 12/2011 Matsuda et al.
 2012/0126255 A1 5/2012 Hussell et al.
 2012/0126257 A1 5/2012 Reiherzer et al.
 2012/0193651 A1 * 8/2012 Edmond et al. 257/88
 2012/0205689 A1 * 8/2012 Welch et al. 257/91
 2012/0241807 A1 * 9/2012 Hoetzel et al. 257/99
 2012/0250310 A1 10/2012 Hussell et al.
 2012/0299022 A1 * 11/2012 Hussell 257/88
 2013/0058099 A1 * 3/2013 Shum et al. 362/294
 2013/0256711 A1 10/2013 Joo et al.

FOREIGN PATENT DOCUMENTS

CN ZL201230652789.0 11/2013
 CN ZL201230652840.8 11/2013
 CN ZL201330361367.2 1/2014
 EP 2 643 861 10/2013
 EP 2 643 862 10/2013
 TW D144159 12/2011
 TW D156539 10/2013

OTHER PUBLICATIONS

Citizen Co. Product Data Sheet—4 pages http://ce.citizen.co.jp/lighting_led/en/products/index.html.
 U.S. Appl. No. 29/379,636 for “Light Emitting Device Package” filed Nov. 22, 2010.
 Design U.S. Appl. No. 29/380,387 for “Light Emitting Device Package” filed Dec. 3, 2010.
 U.S. Appl. No. 13/028,972 for “Light Emitting Devices and Methods” filed Feb. 16, 2011.
 U.S. Appl. No. 13/104,558 for “Light Emitting Devices and Methods” filed May 10, 2011.
 Notice of Allowance for U.S. Appl. No. 29/379,636 dated Aug. 4, 2011.
 Design U.S. Appl. No. 29/404,913 for “Light Emitting Device Component” filed Oct. 26, 2011.
 U.S. Appl. No. 13/224,850 for “Light Emitting Device Component” filed Sep. 2, 2011.
 Design U.S. Appl. No. 29/379,636 for “Light Emitting Device Package” filed Nov. 22, 2011.
 Design U.S. Appl. No. 29/408,955 for “Light Emitting Device Package” filed Dec. 19, 2011.
 U.S. Appl. No. 13,336,540, filed Dec. 23, 2011.
 Notification of Granting Patent Right for Design for Application Serial No. CN 2011/30166527.9 dated Apr. 6, 2012.
 Non-Final Office Action for U.S. Appl. No. 29/380,387 dated Apr. 25, 2012.
 Notice of Granting Patent Right for Design for Application Serial No. CN 2011/30139847.5 dated Apr. 26, 2012.
 Notice of Allowance for U.S. Appl. No. 29/408,955 dated May 7, 2012.

(56)

References Cited

OTHER PUBLICATIONS

Notice of Allowance for U.S. Appl. No. 29/407,084 dated May 18, 2012.

International Search Report and Written Opinion for Application Serial No. PCT/US2011/058603 dated May 23, 2012.

International Search Report and Written Opinion for Application Serial No. PCT/US2011/058601 dated May 24, 2012.

International Search Report and Written Opinion for Application Serial No. PCT/US2011/058596 dated Jun. 18, 2012.

Chinese Office Action for Application Serial No. CN 2012/30130915.6 dated Jul. 12, 2012.

Office Action/Restriction Requirement for U.S. Appl. No. 13/028,972 dated Jul. 25, 2012.

Notification of Grant for Chinese Patent Application No. 2012/30099913.5 dated Aug. 7, 2012.

Notification of Grant for Chinese Patent Application No. 2012/30099981.1 dated Aug. 17, 2012.

Notification of Grant for Chinese Patent Application No. 2012/30099954.4 dated Aug. 17, 2012.

Notice of Allowance for U.S. Appl. No. 29/407,084 dated Aug. 21, 2012.

Notice of Allowance for U.S. Appl. No. 29/380,387 dated Sep. 18, 2012.

Notice of Allowance for U.S. Appl. No. 29/408,955 dated Oct. 4, 2012.

Non-Final Office Action for U.S. Appl. No. 13/028,972 dated Oct. 10, 2012.

Chinese Office Action for Application No. CN 2012/30130915.6 dated Oct. 24, 2012.

Chinese Office Action for Application No. 201230472866.4 dated Nov. 14, 2012.

Non-Final Office Action for U.S. Appl. No. 13/104,558 dated Jan. 3, 2013.

Taiwanese Search Report for Application No. 101302309 dated Jan. 14, 2013.

Taiwanese Office Action for Application No. 101302309 dated Jan. 23, 2013.

Chinese Decision to Grant for Application No. 201230472866.4 dated Jan. 24, 2013.

Notice of Allowance for U.S. Appl. No. 13/336,540 dated Jan. 31, 2013.

Restriction Requirement for U.S. Appl. No. 13/671,089 dated Feb. 7, 2013.

Restriction Requirement for U.S. Appl. No. 29/404,913 dated Feb. 15, 2013.

Japanese Office Action for Application No. 2012-023963 dated Feb. 26, 2013.

Japanese Office Action for Application No. 2012-026117 dated Feb. 26, 2013.

Chinese Office Action for Application No. CN 2012/30130915.6 dated Feb. 27, 2013.

Notice of Allowance for U.S. Appl. No. 13/028,972 dated Feb. 28, 2013.

International Search Report and Written Opinion for Application No. PCT/US2012/051344 dated Feb. 28, 2013.

International Search Report and Written Opinion for Application No. PCT/US2012/063861 dated Mar. 18, 2013.

Non-Final Office Action for U.S. Appl. No. 13/671,089 dated Mar. 29, 2013.

Taiwanese Search Report for Application No. 102300059 dated Apr. 17, 2013.

International Search Report and Written Opinion for Application No. PCT/US2012/070589 dated Apr. 22, 2013.

Taiwanese Search Report for Application No. 102300058 dated Apr. 29, 2013.

International Search Report and Written Opinion for Application No. PCT/US2013/025307 dated May 15, 2013.

Notice of Allowance for U.S. Appl. No. 13/028,972 dated May 23, 2013.

Japanese Office Action for Application No. 2012-031549 dated Jun. 4, 2013.

Japanese Decision of Registration for Application No. 2012-023963 dated Jun. 4, 2013.

Japanese Decision of Registration for Application No. 2012-026117 dated Jun. 4, 2013.

Taiwanese Notice of Allowance for Application No. 101302309 dated Jun. 5, 2013.

Notice of Allowance for U.S. Appl. No. 13/435,912 dated Jun. 19, 2013.

Notice of Allowance for U.S. Appl. No. 29/404,913 dated Jun. 25, 2013.

Chinese Notice of Grant for Application No. 201230652790.3 dated Jun. 26, 2013.

Notice of Allowance for U.S. Appl. No. 13/104,558 dated Jul. 1, 2013.

Chinese Notice of Grant for Application No. 201230130915.6 dated Jul. 3, 2013.

Taiwanese Search Report for Application No. 102301394 dated Jul. 9, 2013.

Taiwanese Search Report for Application No. 102301395 dated Jul. 9, 2013.

Taiwanese Office Action for Application No. 102301394 dated Jul. 15, 2013.

Taiwanese Office Action for Application No. 102301395 dated Jul. 15, 2013.

Chinese Decision to Grant for Application No. 201230652789 dated Jul. 17, 2013.

Chinese Notice of Grant for Application No. 201230652840.3 dated Jul. 26, 2013.

Ex Parte Quayle Action for U.S. Appl. No. 13/671,089 dated Aug. 13, 2013.

Korean Office Action for Application No. 30-2012-0020196 dated Aug. 13, 2013.

Korean Office Action for Application No. 30-2012-0020197 dated Aug. 13, 2013.

Korean Office Action for Application No. 30-2012-0021098 dated Aug. 13, 2013.

Taiwanese Office Action for Application No. 102300058 dated Aug. 27, 2013.

Notice of Allowance for U.S. Appl. No. 13/104,558 dated Aug. 28, 2013.

Non-Final Office Action for U.S. Appl. No. 13/224,850 dated Sep. 5, 2013.

Restriction Requirement for U.S. Appl. No. 13/793,882 dated Sep. 20, 2013.

Restriction Requirement for U.S. Appl. No. 29/417,220 dated Sep. 27, 2013.

Taiwanese Office Action for Application No. 102300059 dated Oct. 1, 2013.

Taiwanese Office Action for Application No. 102301581 dated Sep. 6, 2013.

Taiwanese Office Action for Application No. 102301583 dated Sep. 6, 2013.

Taiwanese Office Action for Application No. 102301584 dated Sep. 6, 2013.

Taiwanese Office Action for Application No. 102301585 dated Sep. 6, 2013.

Restriction Requirement for U.S. Appl. No. 29/425,831 dated Sep. 30, 2013.

Chinese Notice to Grant for Application No. 201330361367.2 dated Oct. 8, 2013.

Notice of Allowance for U.S. Appl. No. 13/671,089 dated Oct. 22, 2013.

Restriction Requirement for U.S. Appl. No. 29/412,166 dated Oct. 25, 2013.

Restriction Requirement for U.S. Appl. No. 29/412,168 dated Oct. 25, 2013.

Japanese Office Action for Application No. 2012-031548 dated Nov. 5, 2013.

Japanese Office Action for Application No. 2012-031549 dated Nov. 5, 2013.

(56)

References Cited

OTHER PUBLICATIONS

Non-Final Office Action for U.S. Appl. No. 13/793,882 dated Nov. 15, 2013.

Taiwanese Notice of Allowance for Application No. 102301394 dated Nov. 8, 2013.

Taiwanese Notice of Allowance for Application No. 102301395 dated Nov. 8, 2013.

Restriction Requirement for U.S. Appl. No. 13/282,172 dated Nov. 26, 2013.

Notice of Allowance for U.S. Appl. No. 29/404,913 dated Nov. 27, 2013.

Taiwanese Notice of Allowance for Application No. 102301583 dated Dec. 17, 2013.

Taiwanese Notice of Allowance for Application No. 102301581 dated Dec. 17, 2013.

Taiwanese Notice of Allowance for Application No. 102301585 dated Dec. 17, 2013.

Notice of Allowance for U.S. Appl. No. 29/412,168 dated Dec. 20, 2013.

Non-Final Office Action for U.S. Appl. No. 29/425,831 dated Dec. 24, 2013.

Notice of Allowance for U.S. Appl. No. 29/412,166 dated Dec. 24, 2013.

Notice of Allowance for U.S. Appl. No. 29/417,220 dated Jan. 10, 2014.

Taiwanese Notice of Allowance for Application No. 102301582 dated Jan. 13, 2014.

Taiwanese Notice of Allowance for Application No. 102301584 dated Jan. 13, 2014.

Japanese Decision of Registration for Application No. 2013-018279 dated Jan. 15, 2014.

Taiwanese Notice of Allowance for Application No. 102300058 dated Jan. 17, 2014.

Taiwanese Notice of Allowance for Application No. 102300059 dated Jan. 17, 2014.

Korean Notice of Rejection for Application No. KR 30-2012-0020198 dated Jan. 14, 2014.

Taiwanese Notice of Allowance for Application No. 101307667 dated Feb. 7, 2014.

Supplemental Notice of Allowance for U.S. Appl. No. 29/404,913 dated Feb. 20, 2014.

Notice of Allowance for U.S. Appl. No. 13/793,882 dated Mar. 12, 2014.

Restriction Requirement for U.S. Appl. No. 14/043,494 dated Mar. 20, 2014.

Restriction Requirement for U.S. Appl. No. 13/908,597 dated Mar. 20, 2014.

Restriction Requirement for U.S. Appl. No. 14/052,201 dated Mar. 20, 2014.

Non-Final Office Action for U.S. Appl. No. 13/282,172 dated Mar. 21, 2014.

* cited by examiner

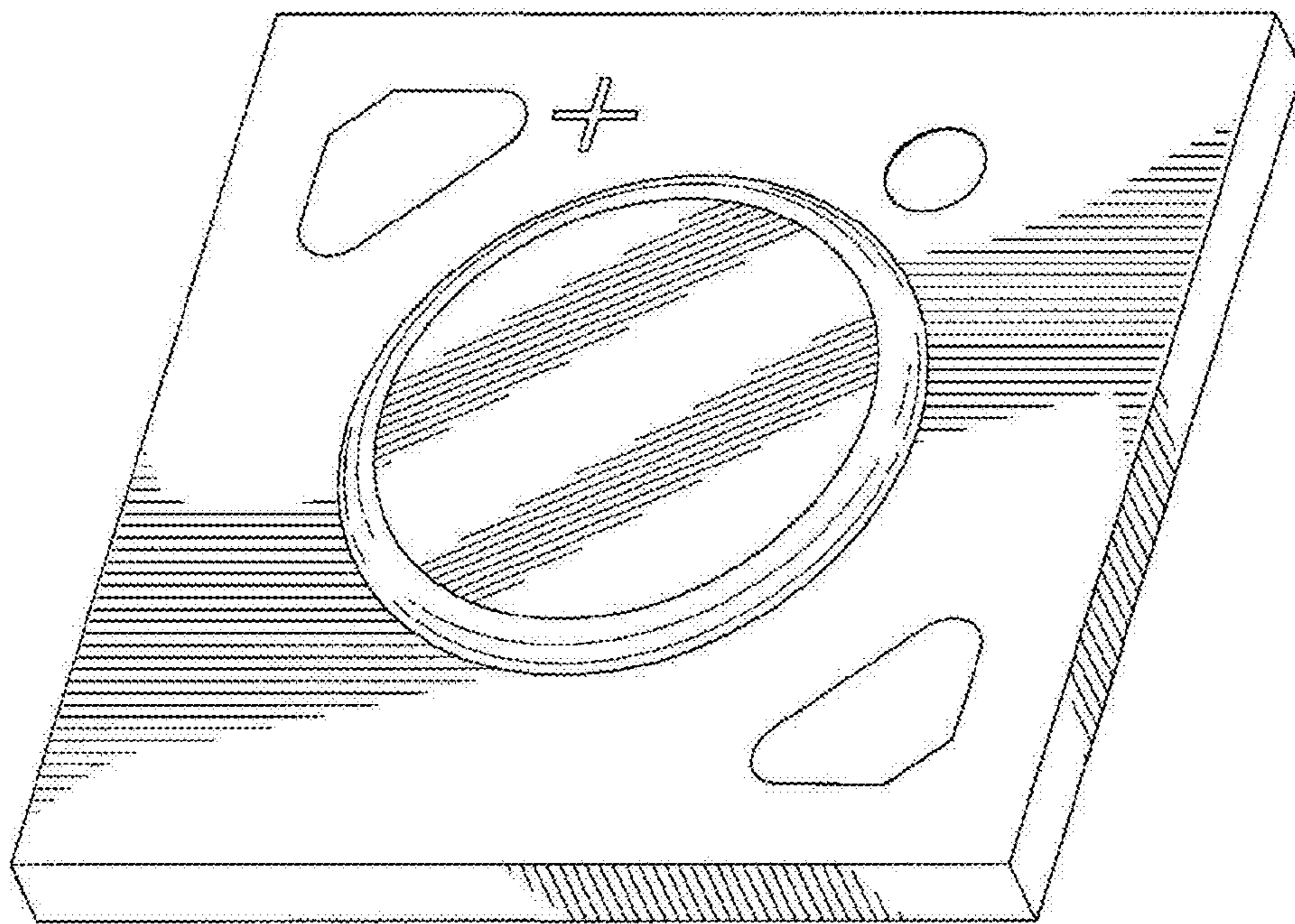


FIG. 1

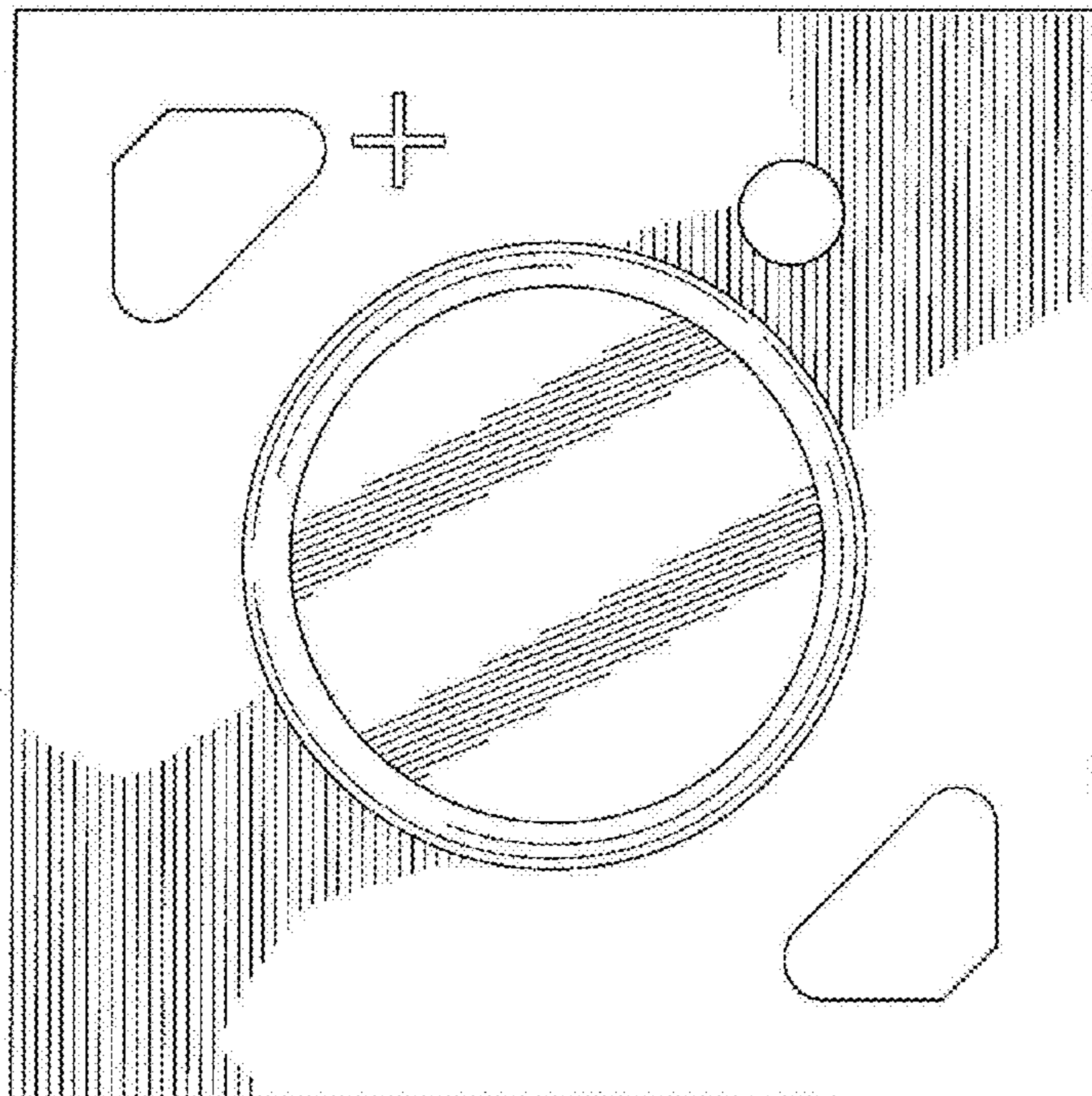


FIG. 2



FIG. 3

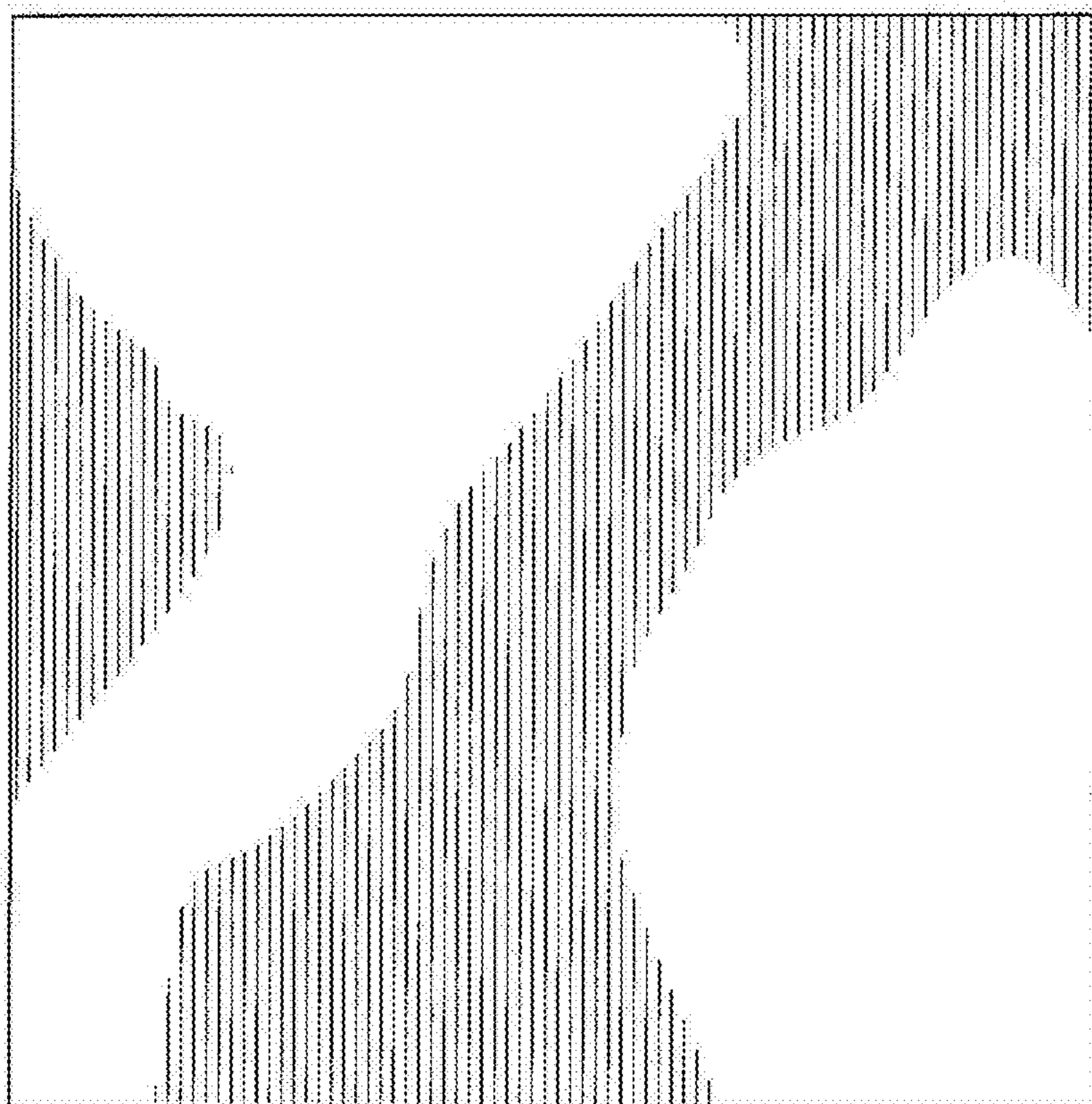


FIG. 4

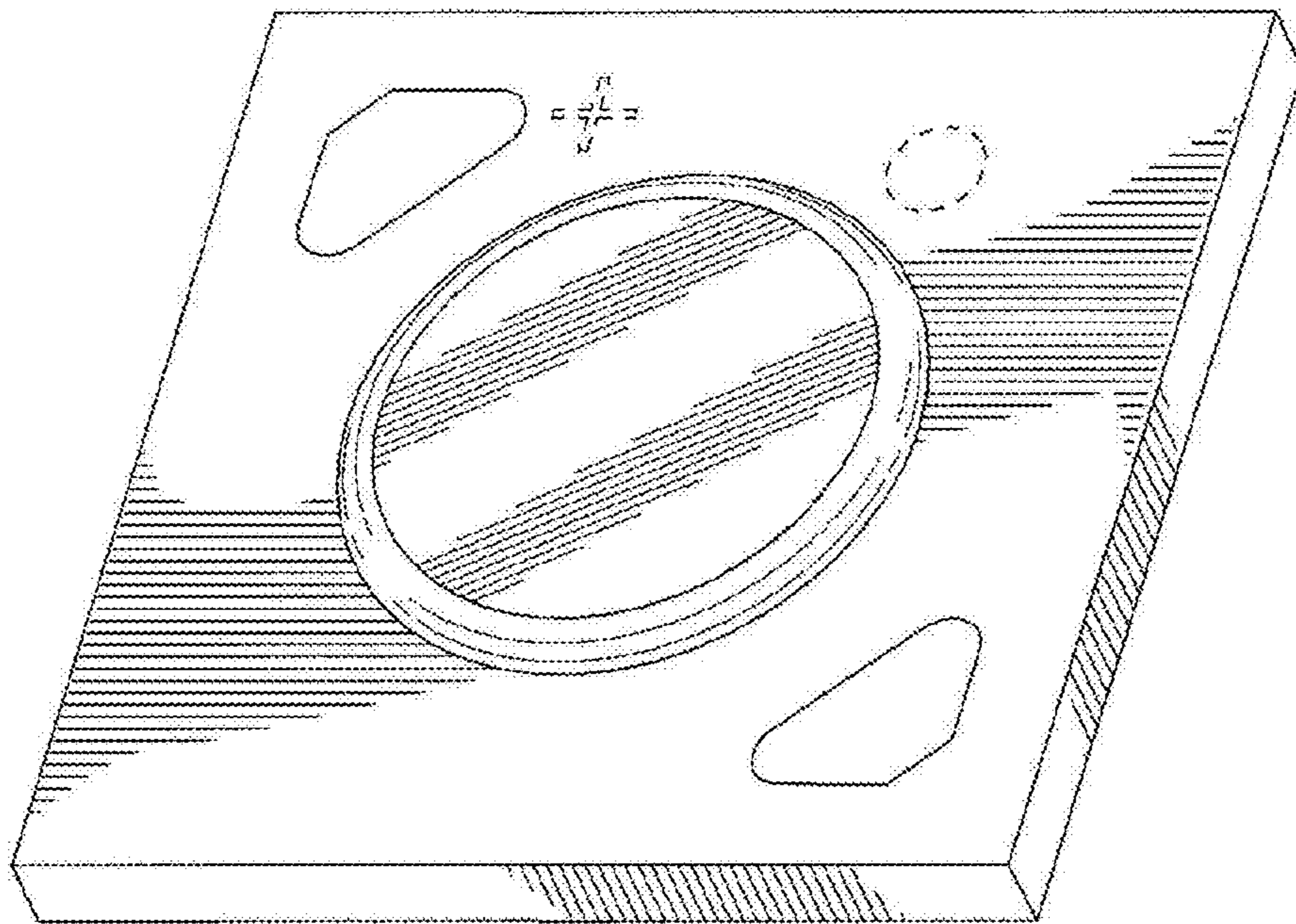


FIG. 5

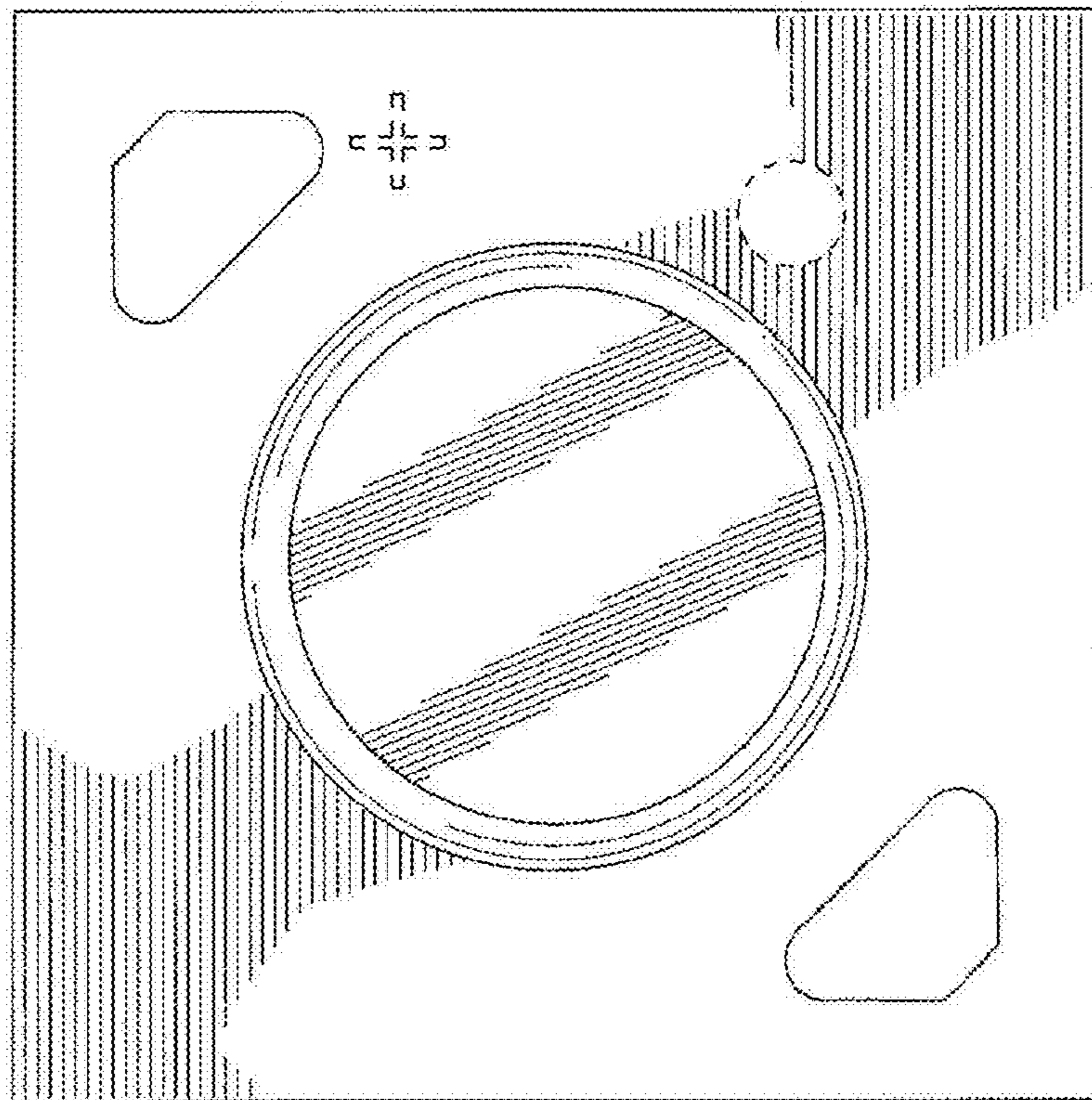


FIG. 6

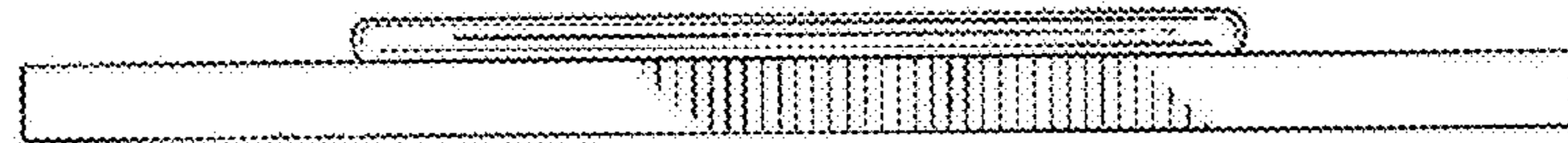


FIG. 7

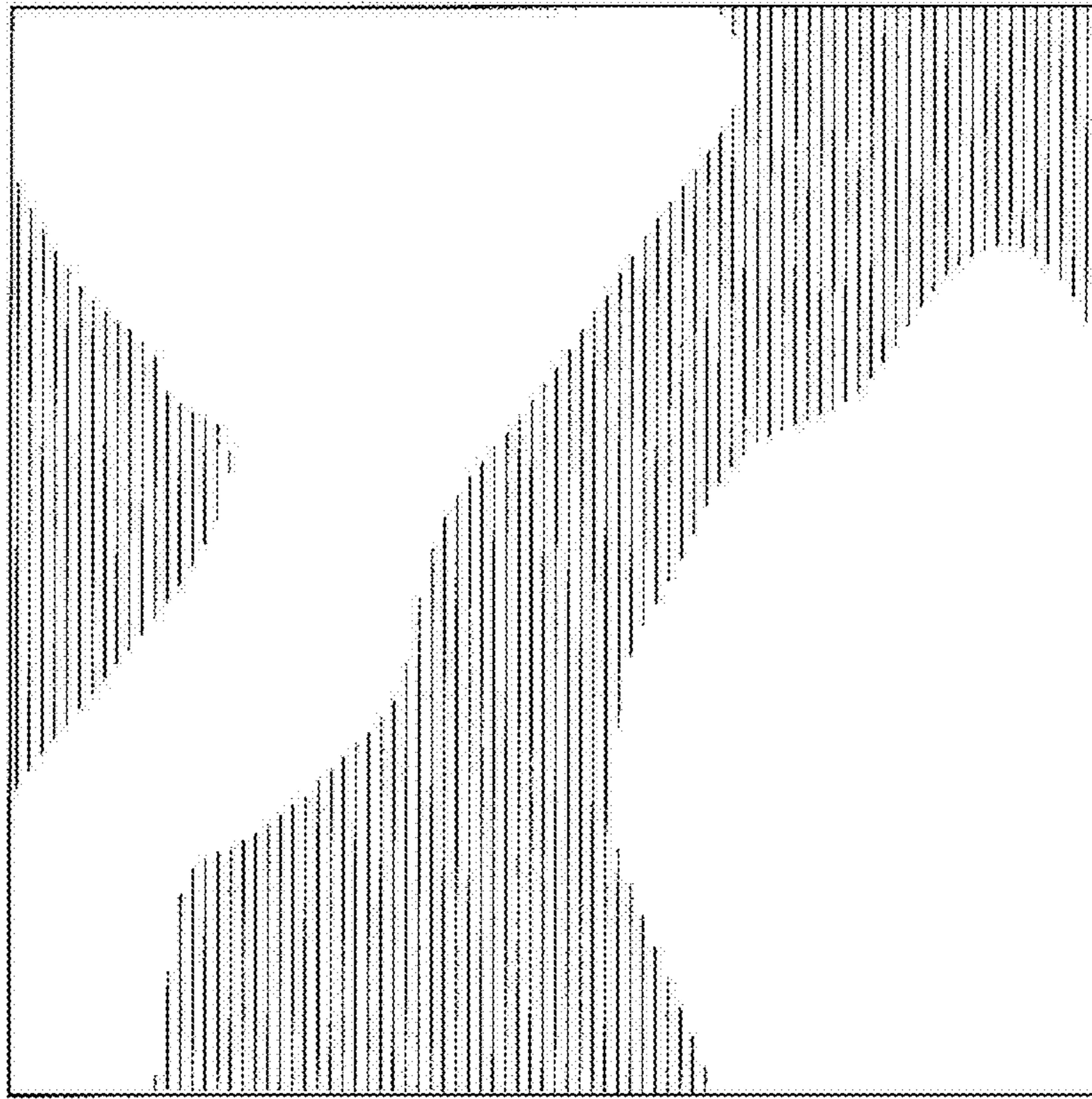


FIG. 8