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

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(45) **Date of Patent:** **** May 19, 2015**

(54) **MEDICAL SYRINGE**

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

(21) Appl. No.: **29/487,740**

(22) Filed: **Apr. 11, 2014**

(30) **Foreign Application Priority Data**

Oct. 17, 2013 (JP) 2013-024129

(51) **LOC (10) Cl.** **24-02**

(52) **U.S. Cl.**
USPC **D24/114**

(58) **Field of Classification Search**

USPC D24/112–114, 133, 186, 104, 130, 127;
606/181, 185; 604/264, 272, 115, 232,
604/187, 158, 164.08, 192, 263, 163, 181,
604/184, 198, 227

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,884,231 A * 5/1975 Peters 604/218
4,978,340 A * 12/1990 Terrill et al. 604/195
5,342,309 A * 8/1994 Hausser 604/110
D383,205 S * 9/1997 Pagay et al. D24/112
5,697,908 A * 12/1997 Imbert et al. 604/110
5,807,343 A * 9/1998 Tucker et al. 604/187
D412,206 S * 7/1999 Basile et al. D24/130
D419,673 S * 1/2000 Schattner D24/128
6,010,481 A * 1/2000 Lee 604/110
D445,176 S * 7/2001 Landers D24/114

D461,243 S * 8/2002 Niedospial, Jr. D24/130
2005/0277892 A1 * 12/2005 Chen 604/192
2011/0009830 A1 * 1/2011 Kosinski et al. 604/227
2014/0005610 A1 1/2014 Kakiuchi et al.

FOREIGN PATENT DOCUMENTS

JP A-08-112333 5/1996
JP B-2514472 7/1996
JP A-2007-111156 5/2007
JP B-4757951 8/2011
TW 200744694 A 12/2007
WO WO 95/11711 A1 5/1995
WO WO 95/17916 A1 7/1995
WO WO 2012/067141 A1 5/2012

* cited by examiner

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(57) **CLAIM**

The ornamental design for a medical syringe, as shown and described.

DESCRIPTION

FIG. 1 is a front right perspective view of a medical syringe showing our new design;

FIG. 2 is a front elevation view thereof;

FIG. 3 is a rear elevation view thereof;

FIG. 4 is a top plan view thereof;

FIG. 5 is a bottom plan view thereof;

FIG. 6 is a left side elevation view thereof;

FIG. 7 is a right side elevation view thereof;

FIG. 8 is a cross-sectional view taken along the line 8-8 in FIG. 6;

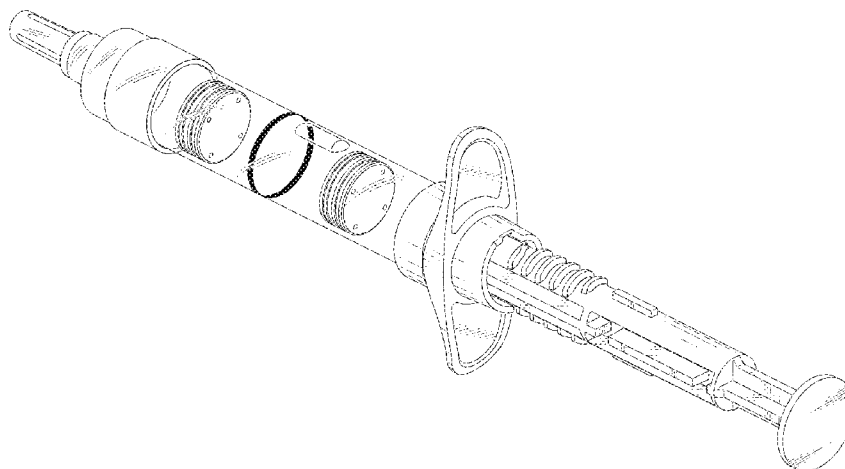
FIG. 9 is a front right perspective view thereof in an alternate configuration with the plunger rod pushed in;

FIG. 10 is a front elevation view thereof;

FIG. 11 is a top plan view thereof; and,

FIG. 12 is a cross-sectional view taken along the line 12-12 in FIG. 11.

1 Claim, 11 Drawing Sheets



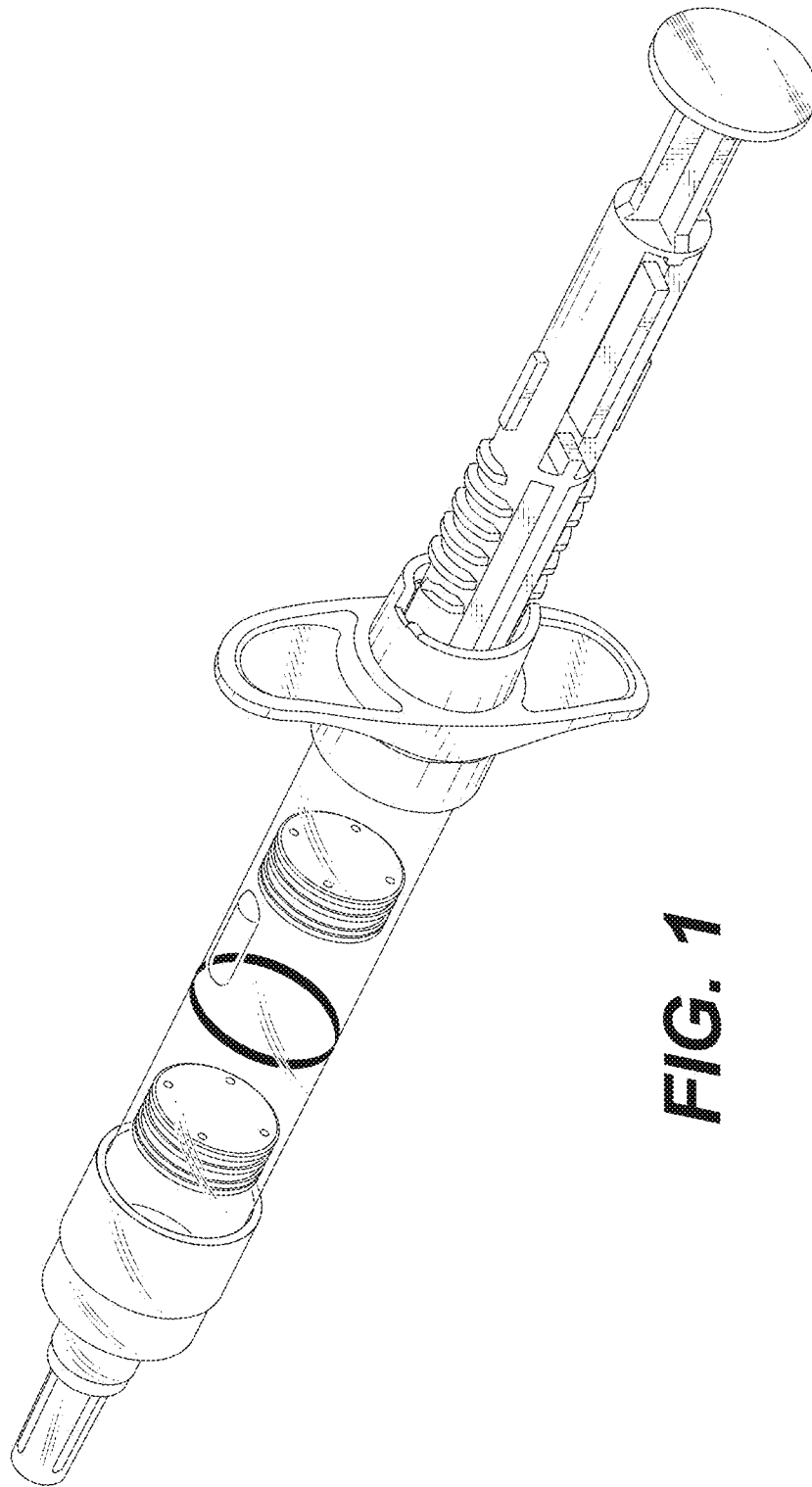


FIG. 1

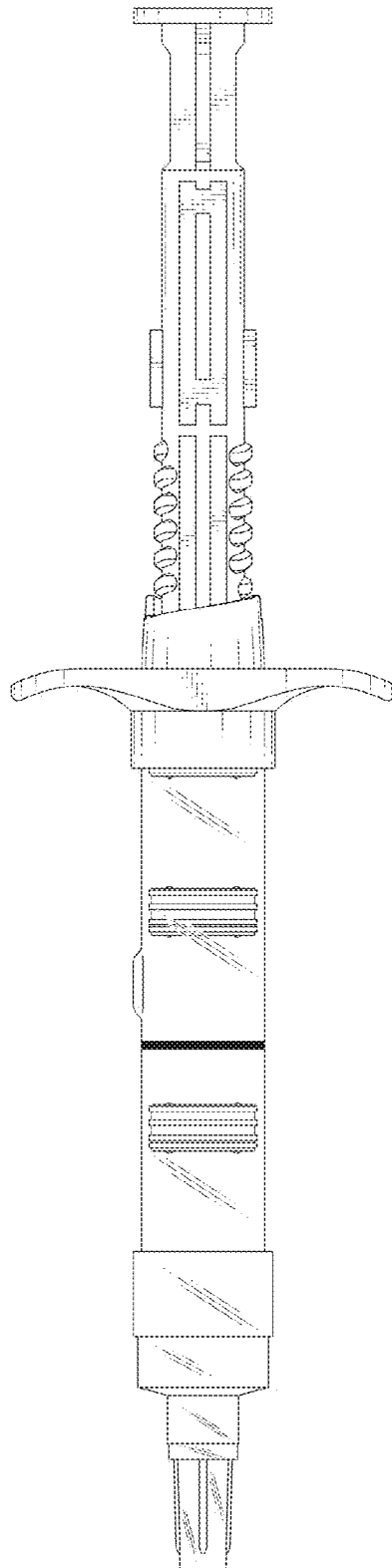


FIG. 2

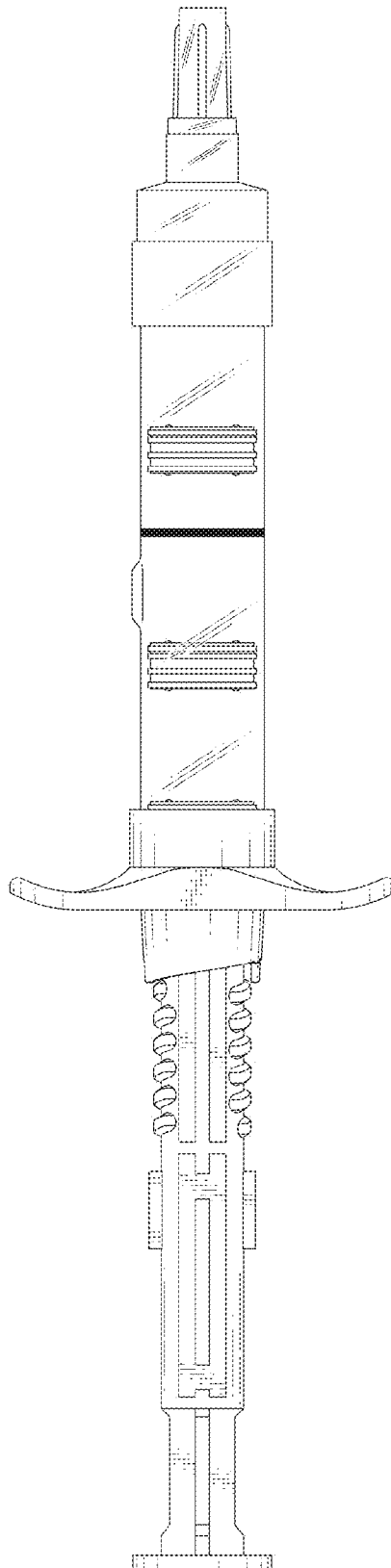


FIG. 3

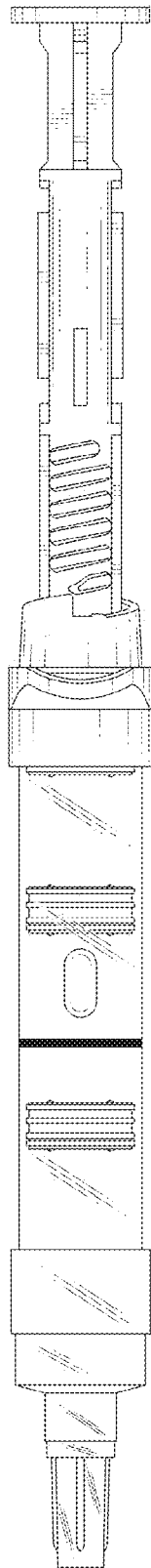


FIG. 4

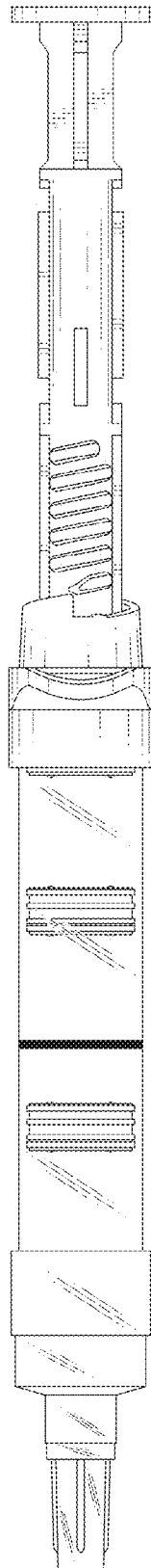


FIG. 5

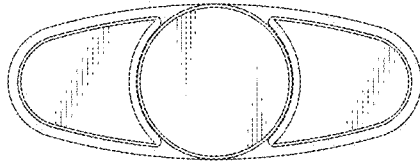


FIG. 7

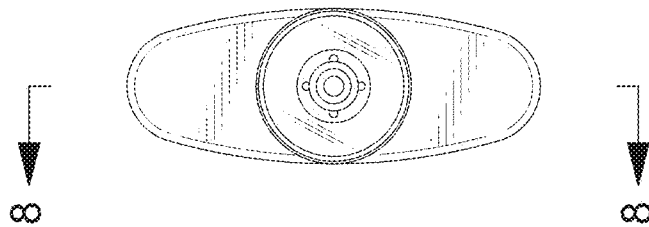


FIG. 6

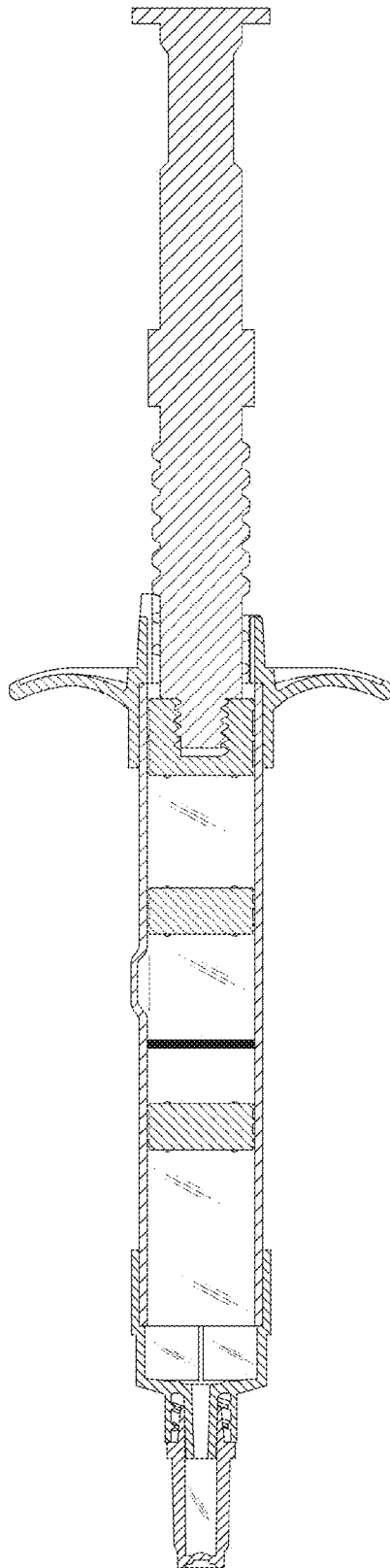


FIG. 8

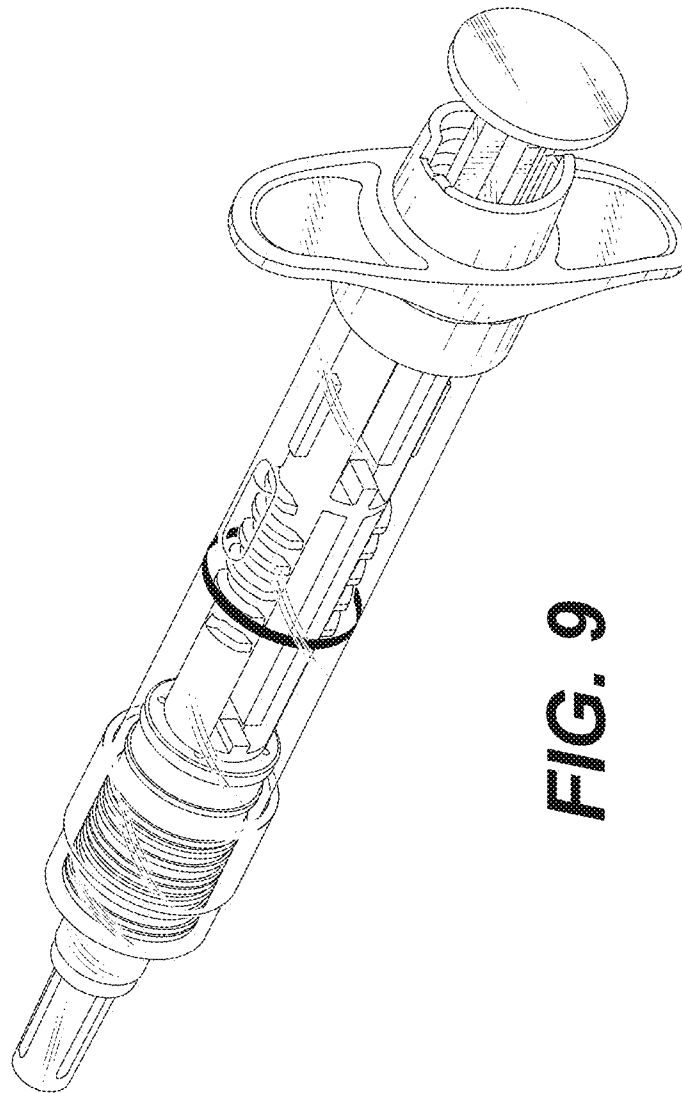


FIG. 9

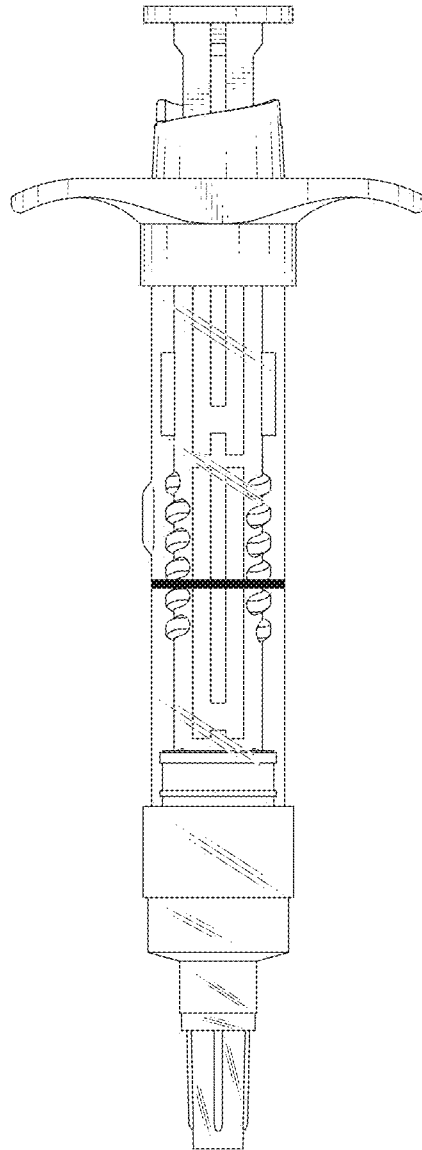
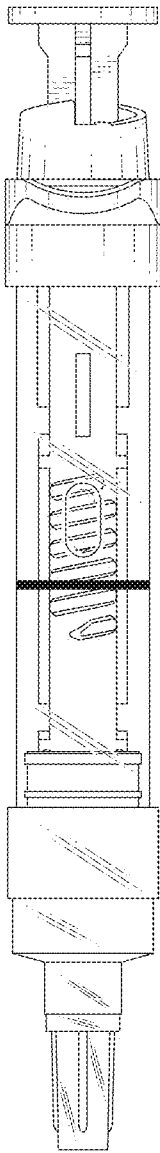


FIG. 10

12



12

FIG. 11

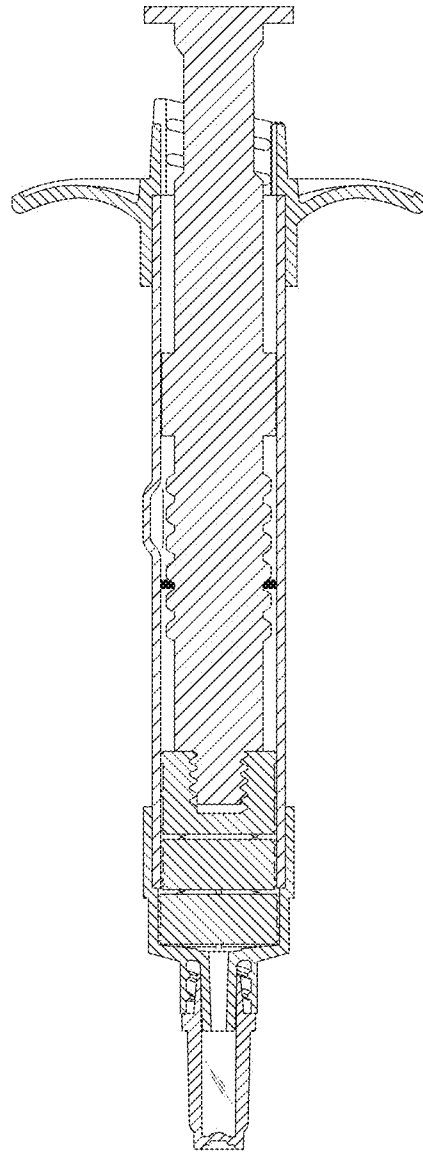


FIG. 12