



US00D780652S

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

(10) **Patent No.:** **US D780,652 S**

(45) **Date of Patent:** **** Mar. 7, 2017**

- (54) **X-FLOWPATH MUFFLER**
- (71) Applicant: **K&N Engineering, Inc.**, Riverside, CA (US)
- (72) Inventors: **Colin Arthur Cranstone**, Palm Springs, CA (US); **Steve E. Williams**, Beaumont, CA (US); **Kevin McClelland**, Rancho Cucamonga, CA (US)
- (73) Assignee: **K&N Engineering, Inc.**, Riverside, CA (US)

- 7,918,311 B2 * 4/2011 Matsueda F01N 1/083
181/251
- 8,220,442 B2 * 7/2012 Caldwell F02M 35/10222
123/568.12
- 8,733,086 B2 * 5/2014 Han B60K 13/04
181/221
- 8,794,586 B2 * 8/2014 Rodecker F01N 13/1805
180/296
- 8,813,900 B2 * 8/2014 Poulin B60K 5/00
180/309
- 8,820,475 B2 * 9/2014 Pradhan F01N 1/04
181/266
- 8,869,932 B2 * 10/2014 Butler F01N 13/1805
181/228

* cited by examiner

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

Primary Examiner — Michael A Pratt

(21) Appl. No.: **29/529,499**

(74) *Attorney, Agent, or Firm* — Rutan & Tucker LLP;
Hani Z. Sayed

(22) Filed: **Jun. 8, 2015**

(51) **LOC (10) Cl.** **12-16**

(52) **U.S. Cl.** **D12/194**

(58) **Field of Classification Search**

USPC D15/5; D12/194

CPC F01N 13/082; F01N 13/1805; F01N 13/20

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

- 4,949,807 A * 8/1990 Hirata F01N 1/084
181/238
- 5,216,809 A * 6/1993 Abbott F01N 1/02
29/506
- 5,773,770 A * 6/1998 Jones F01N 1/02
181/239
- 7,527,774 B2 * 5/2009 Galligan F01N 1/081
181/212

(57) **CLAIM**

The ornamental design for an X-flowpath muffler, as shown and described.

DESCRIPTION

FIG. 1 is a top, front, right side perspective view of the X-flowpath muffler present invention;
 FIG. 2 is a front elevation view;
 FIG. 3 is rear elevation view;
 FIG. 4 is a right side elevation view, the left side elevation view being a mirror image;
 FIG. 5 is a top plan view; and,
 FIG. 6 is a bottom plan view.
 The broken line showing in all drawings views is for the purpose of illustrating portions of the X-flow path muffler that forms no part of the claimed design.

1 Claim, 4 Drawing Sheets

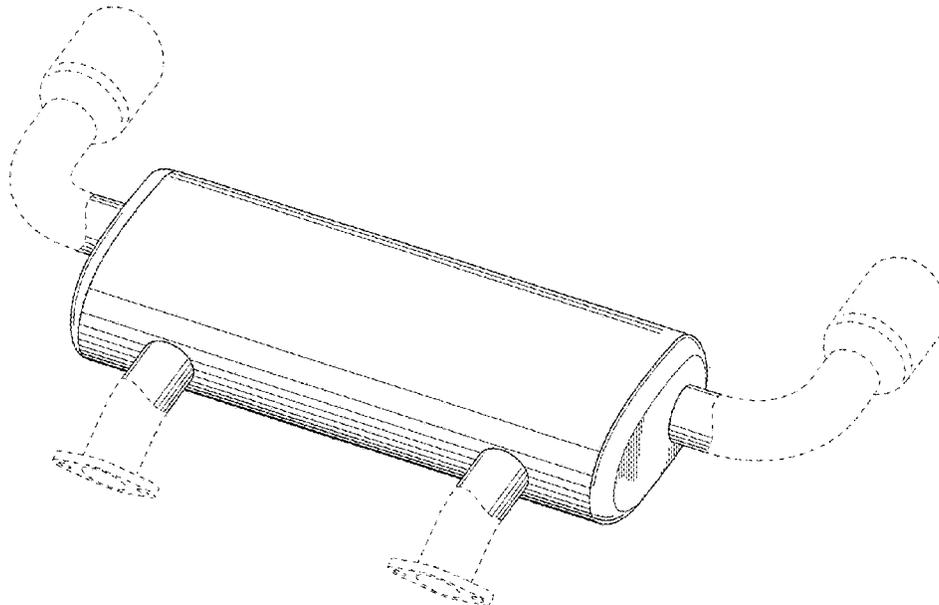
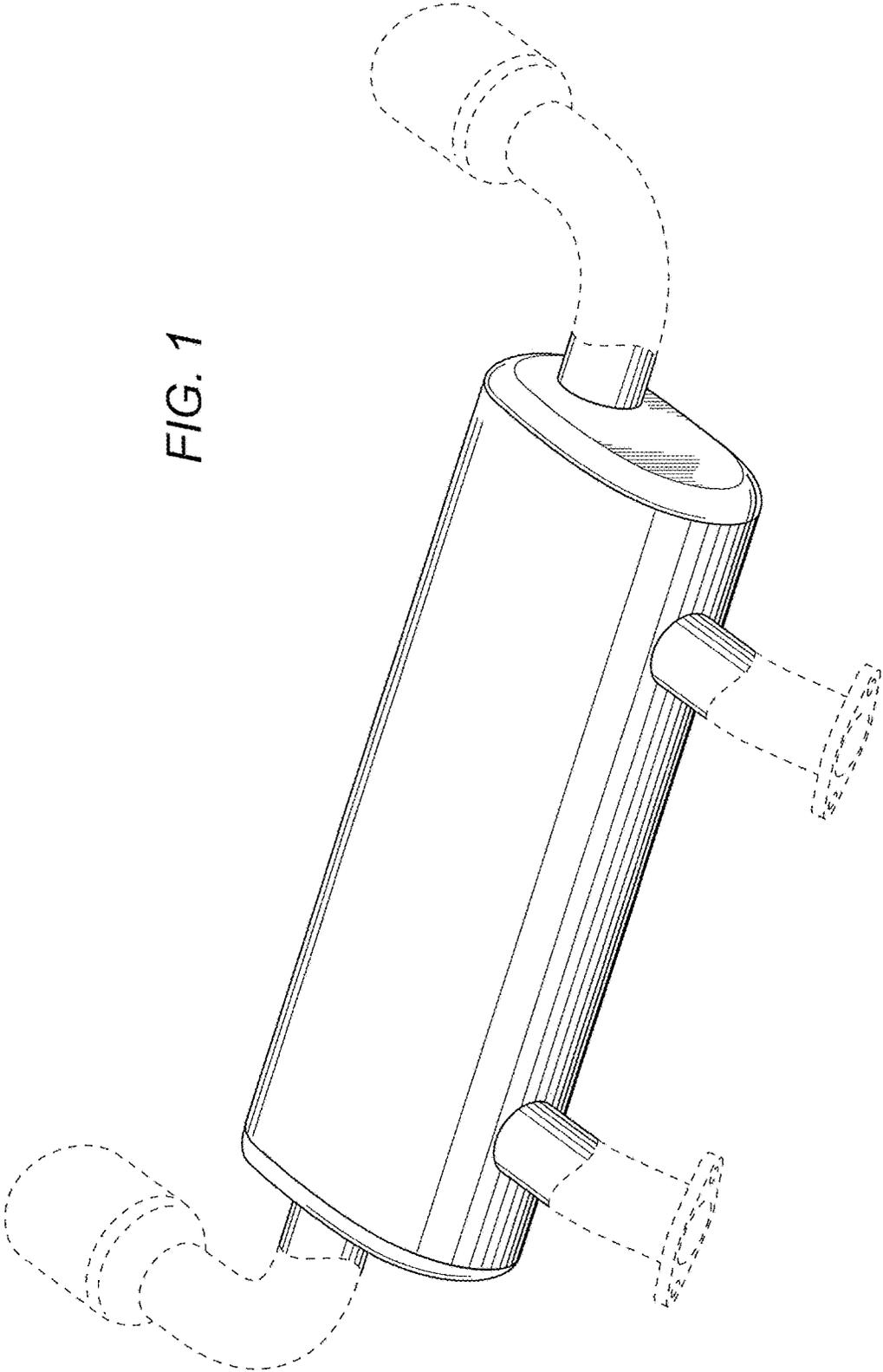


FIG. 1



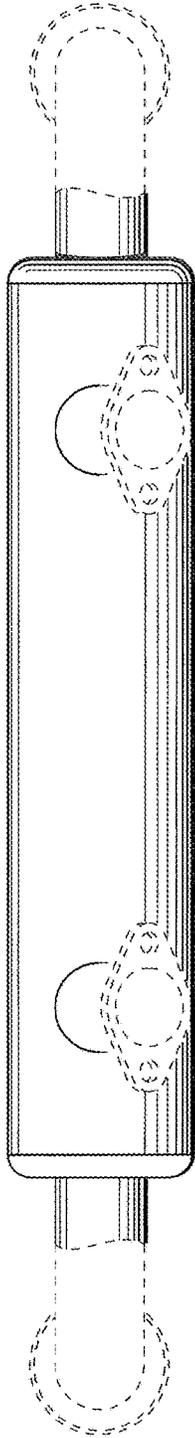


FIG. 2

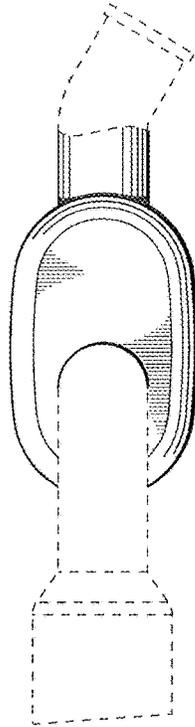


FIG. 4

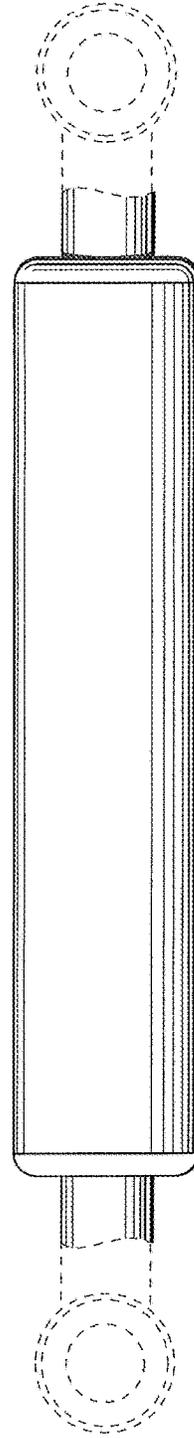


FIG. 3

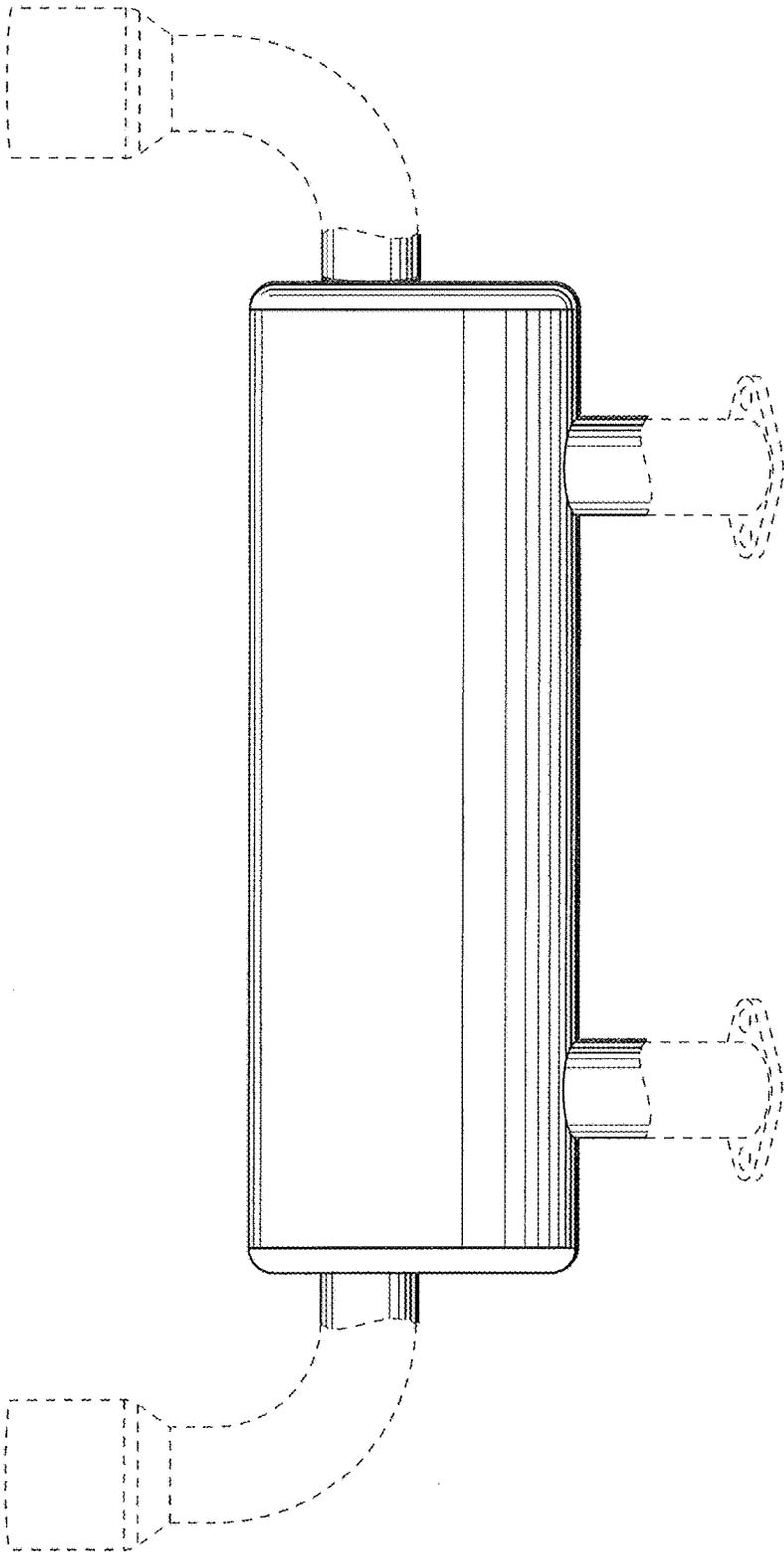


FIG. 5

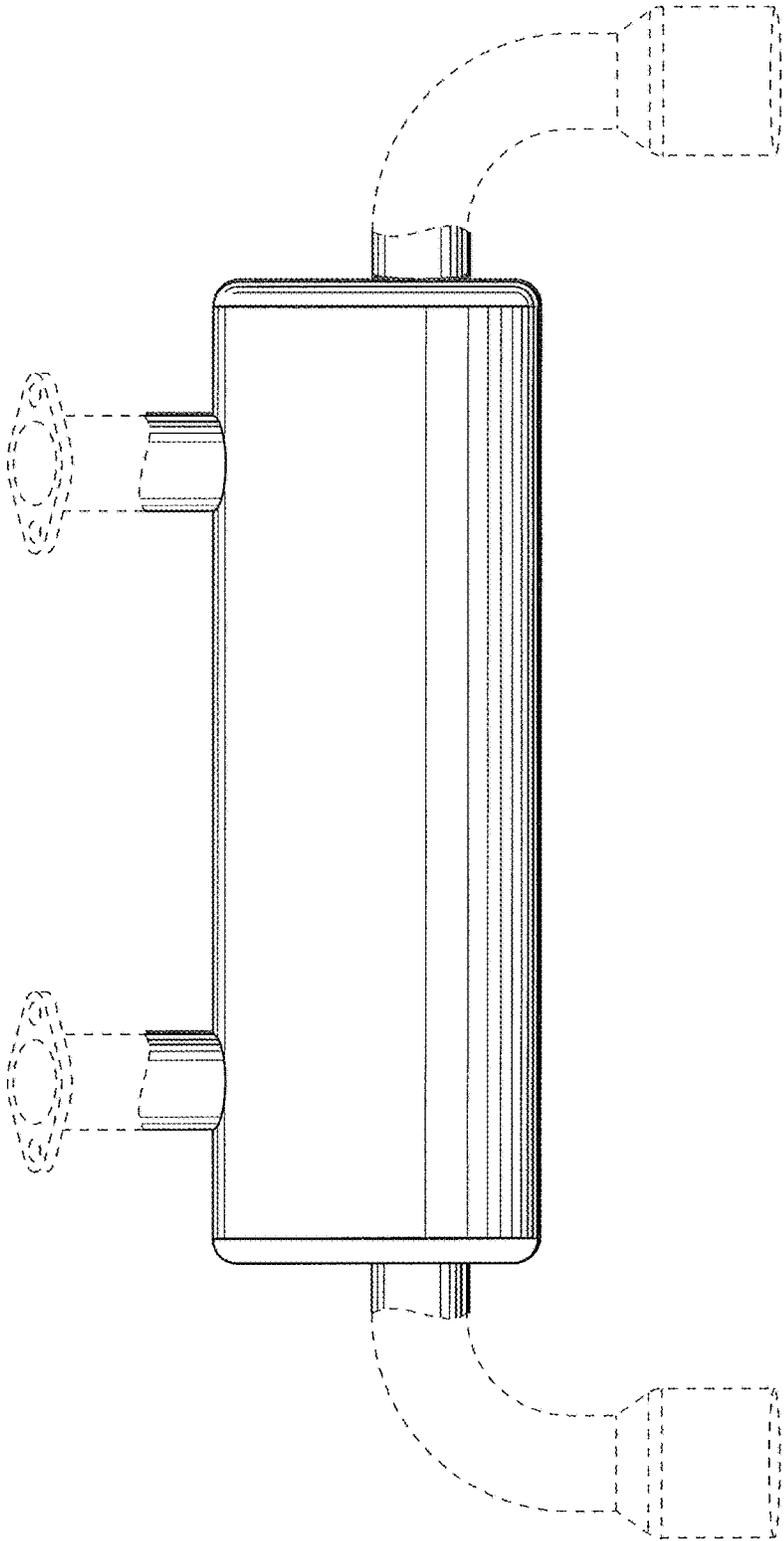


FIG. 6