



US006158624A

United States Patent [19]

[11] Patent Number: **6,158,624**

Grigg et al.

[45] Date of Patent: **Dec. 12, 2000**

[54] **FOAM DISPENSING GUN**

[75] Inventors: **Emmanuel Grigg**, Chesterfield; **Leon Gurevich**, Grover; **Floyd French**, Ballwin; **Michael Boakye-Danquah**, Hazelwood; **James P. McBroom**, House Springs, all of Mo.

[73] Assignee: **The Clayton Corporation**, Fenton, Mo.

[21] Appl. No.: **08/907,380**

[22] Filed: **Aug. 7, 1997**

[51] Int. Cl.⁷ **B67D 5/60**

[52] U.S. Cl. **222/145.6; 222/153.14**

[58] Field of Search 222/145.1, 145.4, 222/145.5, 145.6, 153.14; 251/89; 239/304, 306, 526, 527, 414

[56] References Cited

U.S. PATENT DOCUMENTS

- 4,730,775 3/1988 Maas .
- 4,767,060 8/1988 Shay et al. .
- 4,768,717 9/1988 Shay .
- 4,779,803 10/1988 Corsette .
- 4,883,227 11/1989 Maas .

- 4,911,361 3/1990 Tada .
- 4,913,317 4/1990 Wernicke .
- 5,158,233 10/1992 Foster et al. .
- 5,219,097 6/1993 Huber et al. .
- 5,246,143 9/1993 Churfane .
- 5,265,761 11/1993 Brown .
- 5,271,537 12/1993 Johnson .
- 5,441,180 11/1993 Woodruff .
- 5,445,228 8/1995 Rathmell et al. .
- 5,462,204 10/1995 Finn .

Primary Examiner—Joseph A. Kaufman
Attorney, Agent, or Firm—Paul M. Denk

[57] ABSTRACT

A foam dispensing gun is provided which dispenses a urethane foam. The foam gun, in one aspect, has a dual valve member in which valve seats are moved relative to valve members to open and close flow paths through the foam gun. The valve member opens the flow paths substantially simultaneously and to substantially the same degree so that the A and B resins will be mixed in a 1:1 ratio. The gun is provided with a locking or stop mechanism to prevent accidental activation of the foam gun. In a second aspect of the invention, a disposable urethane foam gun is provided which has only one moving part and no O-rings.

17 Claims, 8 Drawing Sheets

