

ABSTRACT

5 **METHOD AND APPARATUS FOR MAKING SPACED OPENINGS IN A
HOLLOW DEVICE**

10 An apparatus for forming multiple well-defined and precisely spaced openings on long hollow devices features at least one extendable die unit, at least one die holder, at least one piercing assembly, and at least one indexing unit cum alignment fixture. When the long hollow device is aligned by the die alignment fixture and properly indexed, the apparatus extends the extendable die unit
15 into the long hollow device before the piercing assembly creates multiple well-defined and precisely spaced openings without excessive chips or the need to rework the device. As such, a method for creating well-defined and precisely spaced openings on long hollow devices is realised economically and efficiently.

20 Figure 1.