

ABSTRACT

APPARATUS AND METHOD FOR FORMING BARBED SUTURES

An apparatus for forming barbed sutures, wherein a barbed suture comprises a string-like core and a plurality of barbs disposed at intervals apart along the core, the apparatus comprising: a mould comprising at least one set of mould inserts, wherein some of the mould inserts are provided on a first part of the mould, and others of the mould inserts are provided on a second part of the mould, wherein the second part of the mould is moveable relative to the first part of the mould between an open position and a close position, wherein each mould insert has at least one shaped longitudinal edge that partially defines a profile of the barbed suture such that one shaped longitudinal edge of each of all the mould inserts in one set of mould inserts together define a mould cavity for forming one barbed suture therein when the mould is in the close position; wherein the mould cavity comprises a core-shaped cavity configured to form the core of the barbed suture therein and a plurality of barb-shaped cavities configured to form the barbs of the barbed suture therein, wherein the core-shaped cavity is defined by all the mould inserts in each set of mould inserts together and wherein each barb-shaped cavity is defined by two adjacent mould inserts in each set of mould inserts when the mould is in the close position; a suture cartridge configured to present at least one length of suture for moulding in the mould cavity to form the barbed suture therefrom; and heating elements provided to heat the mould inserts during compression moulding of the length of suture in the mould cavity.

Fig. 21