



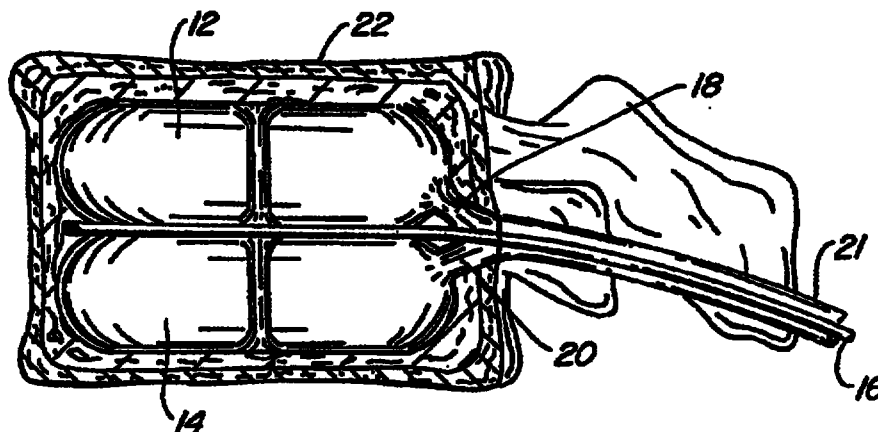
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(54) Title: IMPROVED INFLATABLE DEVICE FOR USE IN SURGICAL PROTOCOLS RELATING TO TREATMENT OF FRACTURED OR DISEASED BONE



(57) Abstract

A balloon (12) for use in compressing cancellous bone and marrow (also known as medullary bone or trabecular bone) against the inner cortex of bones whether the bones are fractured or not. The balloon comprises an inflatable, non-expandable balloon body for insertion into said bone. The body has a shape and size to compress at least a portion of the cancellous bone to form a cavity in the cancellous bone and to restore the original position of the outer cortical bone, if fractured or collapsed. The balloon is prevented from applying excessive pressure to the outer cortical bone. The wall or walls of the balloon are such that proper inflation of the balloon body is achieved to provide for optimum compression of all the bone marrow. The balloon is able to be folded so that it can be inserted quickly into a bone. The balloon can be made to have a suction catheter (16). It can also be coated with therapeutic substances. The main purpose of the balloon is the forming or enlarging of a cavity or passage in a bone, especially in, but not limited to, vertebral bodies. Another important purpose is to deliver therapeutic substances to bone in an improved way.