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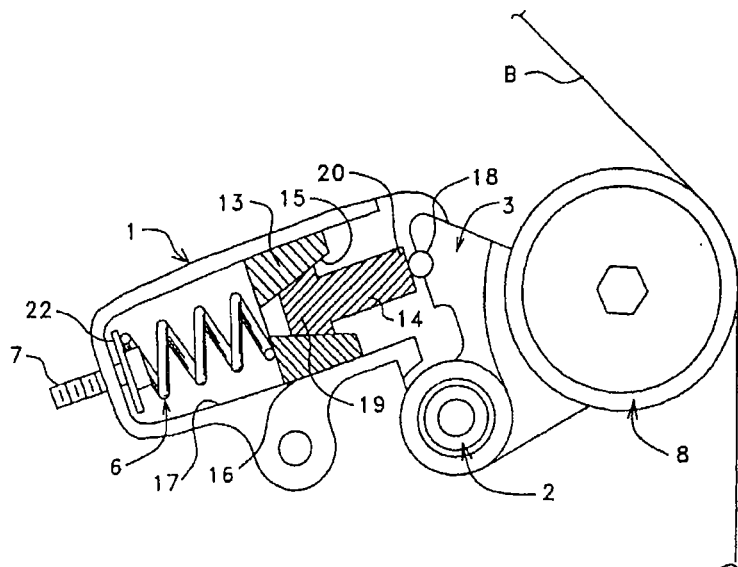
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(54) Title: BELT TENSIONER



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(57) Abstract: The invention comprises a self-contained mechanical belt tensioner that produces damping which is a function of the applied hubload through the effect of frictional forces derived from the sliding action of mutually opposing wedges. A first wedge or conical piston (14) is contained within a housing (1). The conical piston cooperates with a second or conical wedge (13). The outer surface of the second conical wedge slides on the inner surface of the housing. The second conical wedge is expandable in a direction normal to the inner surface of the housing. A spring (6) urges the conical wedge into engagement with the conical piston. As the pulley (8) is loaded, as with an impulse load, the piston will move into the conical wedge. This, in turn, will cause the conical wedge to expand against the inner surface of the housing.

WO 01/079727 A3



ACTION

WO 01/079727 A3

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