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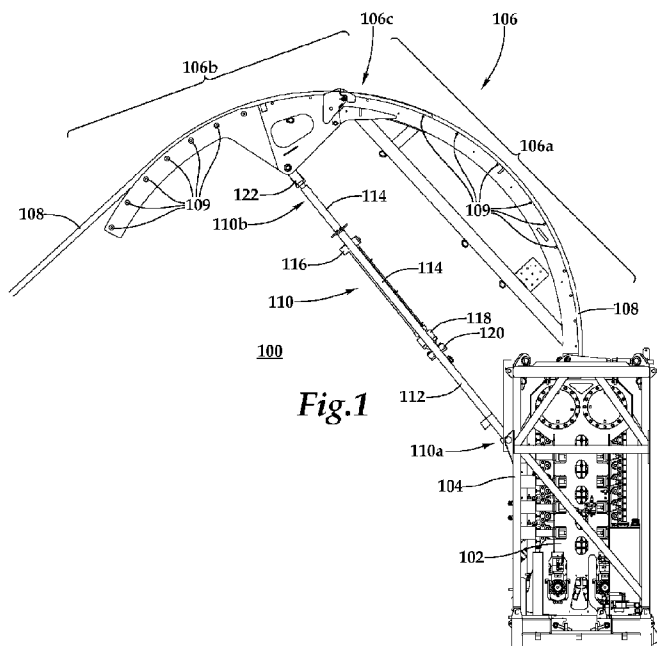
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(54) Title: COILED TUBING INJECTOR WITH LOAD SENSING TUBING GUIDE



(57) Abstract: The invention pertains to methods and
apparatus for monitoring loads on an arched tubing
guide of a coiled tubing injector caused by tension on
coiled tubing. The load is sensed by a load sensor, for
example, a load cell placed in a strut that supports the
arched tubing guide, or in a load pin or load cell placed
within the structure arched tubing guide or the connec-
tion of the arched tubing guide to a frame for the coiled
tubing injector, at a location where the load is repres-
entative of the load placed on an arched tubing guide by
tension in the coiled tubing. The load sensor generates a
feedback signal. The load is monitored, either by an op-
erator or a controller, and torque applied to a reel
around which the tubing is wound is adjusted to avoid,
or in response to, excessive loads on the arched tubing
guide.