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(54) Title: HIGH DEFINITION DRILLING RATE OF PENETRATION FOR MARINE DRILLING

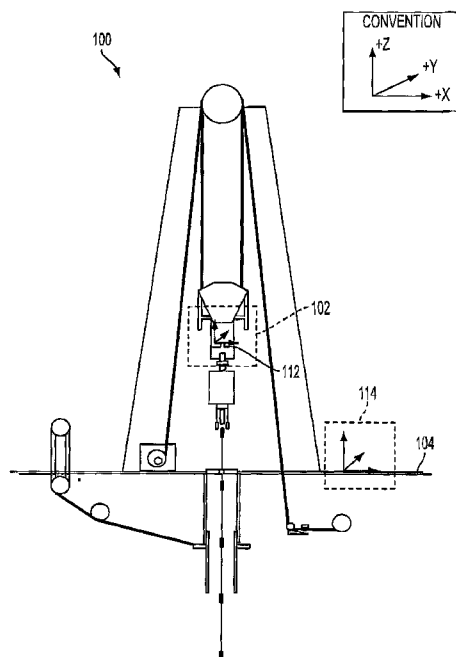


FIG. 1

(57) Abstract: Two sensors may be installed on a marine drill to improve measurements used for monitoring and operating the marine drill. The sensors may be installed in a differential configuration with one sensor located on a top block of the marine drill and a second sensor located on a drilling floor of the marine drill. Various calculations may be performed using measurements obtained from the two sensors such as, for example, rate of penetration of the marine drill, drilling level bubble for the marine drill out of straightness values for the marine drill, and vibration, motion for the marine drill.