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(54) Title: SMART GROUPING LEGEND

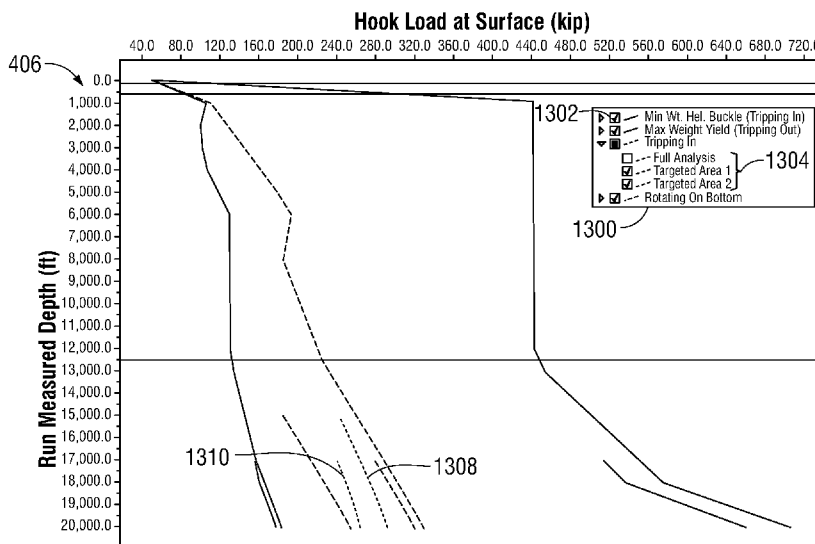


FIG. 15C

(57) Abstract: A smart legend groups plot lines that reflect the same type of drill string analysis. The smart legend includes parent level legend entries, each parent level legend entry including child level legend entries. The child level legend entries for a given parent level legend entry correspond to plot lines that reflect a particular type of drill string analysis. Each child level legend entry corresponds to a plot line that reflects the particular drill string analysis performed over a different depth range. This allows users easily to view and compare the analyses at the different drilling depth ranges.