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(54) Title: A DRIVE SYSTEM FOR A SKID STEERED VEHICLE

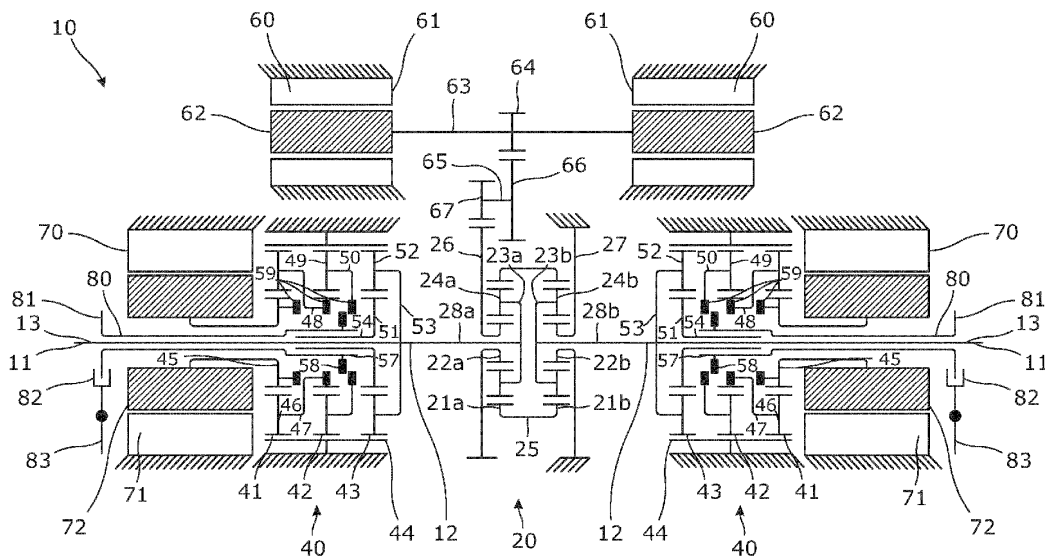


Figure 2

(57) Abstract: A drive unit for a skid steered vehicle comprises a controlled differential positioned between two shafts. The end of each shaft forms an output of the drive unit connected directly to the differential outputs via the shafts. A steer motor is in driveable communication with the differential, and an electric propulsion motor is in driveable communication with the shaft outputs. A gear reduction unit, and optional gear change unit, is positioned between the differential and the electric propulsion motor. The electric propulsion motor, the gear reduction unit and optional gear change unit are connected in a parallel connection with an output of the differential to the shaft outputs. The optional gear change unit comprises an epicyclic gear reduction unit having an input and an output which provides drive input from the gear change unit to the shaft. A gear change set has a master gear that receives drive output from the electric propulsion motor, and slave gears which are driven by the master gear via one or more gear chains. A dog clutch slideably

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engages the input of the gear reduction unit and selectively engages with the master gear or slave gears so that the selected position of the dog clutch determines which gear is engaged.