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(54) **ADAPTIVE SHIFT SCHEDULING SYSTEM**

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CPC ***F16H 61/0213*** (2013.01); *F16H 2061/0216* (2013.01); *F16H 2061/0223* (2013.01)

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CPC F16H 61/10; F16H 61/0213; F16H 2061/0223; F16H 2061/0216
See application file for complete search history.

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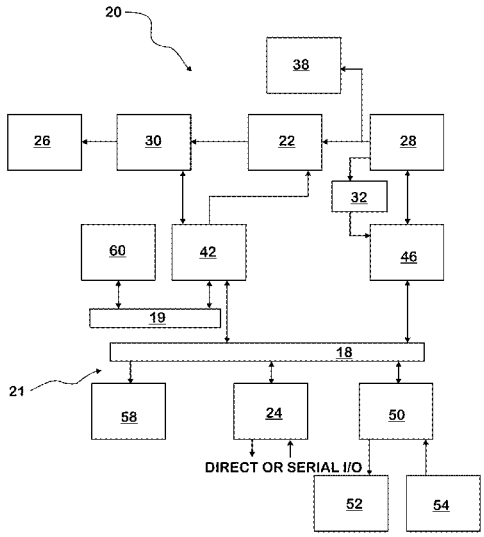
(57) **ABSTRACT**

A method of generating shift schedules for a vehicle having a transmission with a plurality of gears includes providing a plurality of a transmission operational modes categorized by ratios of available traction power after a transmission gear shift compared to available traction power before the transmission gear shift. Based on the list of available traction power the available traction power is determined for each of the plurality of gears over a range of engine speeds. This includes adjusting for parasitic losses and dynamic de-rate conditions at each engine speed datum point. Shift schedules are generated for shifts between gears of the transmission for at least a first transmission operational mode in terms of ratios of available traction power before and after gear shifts.

11 Claims, 12 Drawing Sheets