

SPEED CONTROL DEVICE FOR CONTROL OF IDLER OF WIND TURBINE TO ROTATE AT CONSTANT SPEED

ABSTRACT

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A speed control device for control of idlers of wind turbines is provided. The speed control device includes a wind-powered electrical generator, a first speed control unit, a transmission gear set, an idler energy storage unit, and a second speed control unit. A wind activation gear set of the wind-powered electrical generator is driven by a wind force with a preset value. When
10 the wind force is lower than the preset value, a rack unit on a speed-control motor is driven by power so that a speed-control gear set and the transmission gear set are respectively driven by a first and a second unidirectional gear of the first and the second speed control units. Thus the transmission gear set is rotated for a period and an idler drives a generator main shaft of the idler energy storage unit to rotate for a period. Therefore, the idler rotates constantly, without
15 stopping.

FIG. 1