

## MINIATURIZED HYBRID FEEDBACK CONTROL METHOD AND SYSTEM

### Abstract

5            This invention relates to a four wheel moving object. The four wheel moving object implements a miniaturized hybrid feedback control comprising a magnet holder, a magnetic encoder and an optical encoder. The magnet holder has a first open end and a second open end. The first open end is coupled to a shaft of the drive train. The second open end has a cavity. The magnetic encoder includes a magnet secured in the cavity of  
10   the magnet holder, and a sensing element position apart from the magnet and facing the second open end. The optical encoder includes a light emitting element and a sensing element position apart from the magnet holder and facing a surface defined between the first and second open ends. The magnet holder further includes a number of markings on the surface between the first and second open ends.

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Figure 1 to accompany the abstract