

**Spherical wheel intended for moving a vehicle and
vehicle using the wheel**

The invention relates to a spherical wheel intended to move a vehicle and a vehicle using the wheel. The wheel (10) comprises two caps (15, 16), the surface of which follows the spherical surface of the wheel (10), the caps (15, 16) each being articulated by means of a pivot link (19, 20) relative to a shaft. The wheel (10) further comprises two casters (28, 29) each arranged in an opening of each of the caps (15, 16), the opening being centered about the axis (21, 22) of the corresponding pivot link (19, 20), each caster (28, 29) being arranged in the extension of the pivot link (19, 20) of the cap concerned (15, 16). Each caster (28, 29) ensures a rolling at the level of the spherical surface. Radii S of the opening of each cap (15, 16) and r of the corresponding caster (28, 29) are defined so as to substantially balance forces needed to drive a cap (15, 16) and the corresponding caster (28, 29) when the wheel (10) goes from bearing on the ground on a cap (15, 16) at the edge of the opening to bearing on the ground on the corresponding caster (28, 29).

Figure 4.