

SYSTEM AND METHOD FOR INSPECTING VEHICLE TYRES

Abstract

- 5 The present disclosure generally relates to inspection of vehicle tyres. An inspection robot for inspecting vehicle tyres include comprises:
- a chassis body comprising a driving mechanism for driving the inspection robot;
 - a robotic arm assembly coupled to the chassis body for actuating around
 - 10 a set of tyres of the vehicle, the robotic arm assembly comprising:
 - a first arm actuatable around an arc surface of the set of tyres, the arc surface comprising a tyre tread; and
 - a second arm coupled to the first robotic arm and actuatable around a sidewall of the set of tyres; and
 - 15 first stereo sensors moveable by the first arm around the arc surface for capturing stereo images of the tyre tread,
 - wherein a 3D image profile of the tyre tread is constructable from the stereo images of the tyre tread for inspection of the tyre tread.

20 Figure 4A