CLAIMS

1. A vehicle, preferably an unmanned and/or autonomous vehicle, for example a robot, the vehicle comprising:

a propulsion system, arranged to propel the vehicle, comprising a set of wheels including a first wheel and/or a set of tracks including a first track;

a deposition apparatus for depositing a foam comprising a polymeric composition; and

a controller arranged to control the deposition apparatus and optionally, the propulsion system;

wherein the deposition apparatus comprises:

a set of reservoirs, including a first reservoir and a second reservoir arranged to receive therein a first component and a second component of the polymeric composition, respectively;

optionally a set of pumps, including a first pump and a second pump arranged to pump the first component and the second component from the first reservoir and the second reservoir, respectively;

a blending chamber in fluid communication with the set of reservoirs via a set of inlet passageways, including a first inlet passageway and a second inlet passageway, wherein the blending chamber is arranged to blend the first component and the second component therein to provide a precursor of the polymeric composition; and

a set of deposition nozzles in fluid communication with the blending chamber via a set of outlet passageways including a first outlet passageway, the set of deposition nozzles including a first deposition nozzle comprising a static mixer arranged to mix the precursor to generate the foam, at least in part, therefrom,

the vehicle further comprising a set of sensors including a first sensor arranged to sense an obstacle and to transmit a first signal to the controller, in response to sensing the obstacle,

wherein the controller is arranged to receive the first signal transmitted by the first sensor and to control the propulsion system and/or the deposition apparatus, based, at least in part, on the received first signal,

wherein the controller is further arranged to control the propulsion system to move the vehicle rearwardly or forwardly and to control the deposition apparatus to deposit the foam, based, at least in part, on the received first signal.

2. The vehicle according to any previous claim, wherein the set of deposition nozzles includes a second deposition nozzle in fluid communication with the blending chamber via a second outlet passageway of the set of outlet passageways.

3. The vehicle according to any previous claim:

wherein the set of reservoirs includes a third reservoir arranged to receive therein a solvent for cleaning the blending chamber, the set of outlet passageways and/or the set of deposition nozzles;

optionally wherein the set of pumps includes a third pump arranged to pump the solvent from the third reservoir; and

wherein the set of inlet passageways includes a third inlet passageway.

4. The vehicle according to any previous claim, wherein the first deposition nozzle is arranged forwardly of the set of wheels, preferably forwardly of the first wheel, and/or forwardly of the set of tracks, preferably forwardly of the first track.

5. The vehicle according to any previous claim, wherein the first deposition nozzle is arranged aligned with the set of wheels, preferably aligned with the first wheel, and/or aligned with the set of tracks, preferably aligned with the first track.

6. The vehicle according to any previous claim, wherein the controller is arranged to control the propulsion system to move the vehicle rearwardly and to control the deposition apparatus to deposit the foam, based, at least in part, on the received first signal, while the vehicle moves rearwardly.

7. The vehicle according to claim 6, wherein the controller is arranged to control the propulsion system to move the vehicle forwardly after depositing the foam.

8. The vehicle according to any of the previous claims 1 to 5, wherein the controller is arranged to control the propulsion system to move the vehicle forwardly and to control the deposition apparatus to deposit the foam, based, at least in part, on the received first signal, while the vehicle moves forwardly.

9. A method of controlling a vehicle according to any previous claim to deposit a foam comprising a polymeric composition, the method comprising:

blending, using the blending chamber, the first component and the second component of the polymeric composition to provide the precursor of the polymeric composition;

generating the foam, at least in part, by mixing, using the static mixer included in the first deposition nozzle, the precursor; and

depositing the foam, at least in part, via the first deposition nozzle.