

AbstractLocation-aware robot, and system for controlling such a robot

5 UWB pulses are transmitted in both directions between a base station 3 and
robots 1, 2. The base station 3 is capable of using the UWB pulses it receives to
obtain both the direction and distance of the robots 1,2 from the base station. The
UWB pulses the base station 3 sends to the robots 1,2 include data, and the
robots 1,2 move in response to the data. Since only a single base station is
10 required, the cost of the system may be relatively low. Furthermore, it may be
capable of being deployed in a new environment at relatively low cost. In a
variation of this proposal, the base station 13 is mounted on a robot 11 having a
tool ("hand") 16 associated with a UWB tag 17. Another such tag 19 is mounted
on an object 18. The base station 13 determines the direction and position of the
15 tags 17,19, and so controls the tool to act on the object.

[Fig. 2]



162162



G00002