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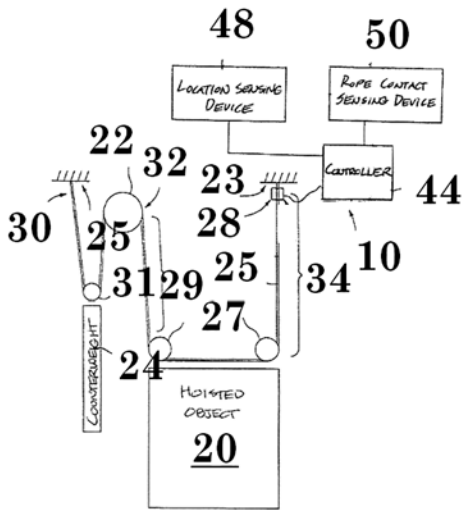

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Figure 13: Schematically illustrates another embodiment the system for positioning wire ropes.

rectly or indirectly, to the first end portions **28** of at least two of the wire ropes **12**, **14**, **16**, **18** to form a circuit with the monitored portions **34** of the respective wire ropes **12**, **14**, **16**, **18**. The controller **44** is operable to selectively apply a signal to the monitored portions **34** of the respective wire ropes **12**, **14**, **16**, **18** and determine an electrical characteristic (e.g., an electrical resistance) thereof. For example, the controller **44** may selectively apply a signal having a known electrical current to the monitored portions **34** of the respective wire ropes **12**, **14**, **16**, **18**, and may determine the electrical resistance thereof by measuring a voltage across the monitored portions **34** of the respective wire ropes **12**, **14**, **16**, **18** by applying Ohm's law. The controller 44 uses the determined electrical characteristic to determine a condition of the respective wire ropes **12**, **14**, **16**, **18**; e.g., to determine whether the respective wire ropes **12**, **14**, **16**, **18** are experiencing wear or other damage that may cause weakening. The controller **44** is adapted (e.g., programmed) to selectively perform the functions described herein. The functionality of the controller **44** may be implemented using hardware, software, firmware, or a combination thereof. In embodiments in which the controller **44** determines an electrical resistance of the monitored portions **34** of the wire ropes **12**, **14**, **16**, **18**, for example, the controller **44** may include an electrical current source and a volt meter. A person skilled in the art would be able to adapt (e.g., program) the controller **44** to perform the functionality described herein without undue experimentation.

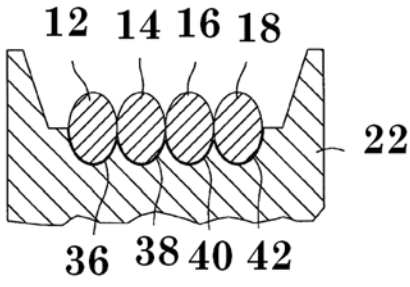

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Figure 14: Partial sectional view of an electrically connecting sheave with wire ropes contacting it.

In the electrical connection configuration illustrated in figure 15, a circuit is formed by electrical connection of the controller **44** to the first end portion **28** of the first wire rope **12** and the first end portion **28** of the second wire rope **14**, and by electrical connection of the contact portions **32** of the first