wherein a first and a second position range are defined,

wherein each position range includes positions of the magnet with respect to the sensor,

wherein the processor generates an output signal from the at least one sensor signal, and

wherein the output signal takes on values that are unambiguously associated with a position of the magnet relative to the sensor in the first position range and takes on a constant value that is independent of the position of the magnet relative to the sensor in the second position range.

2. The device according to claim **1**, wherein the magnet is connected to the pedal through an element or is mounted on the pedal.

3. The device according to claim **1**, wherein the sensor detects at least two spatial components of the magnetic field.

4. The device according to claim **1**, wherein a gradient is determined from each of the at least two spatial components of the magnetic field by the sensor and provided at the output as sensor signals.

5. The device according to claim **4**, wherein a position signal is calculated and/or a signal strength is calculated from the sensor signals by the processor.

6. The device according to claim **1**, wherein a gradient is determined by the sensor from each of the at least two spatial components of the magnetic field, and a position signal and/or a signal strength is calculated from the gradients, and wherein the position signal and/or the signal strength are provided as sensor signals at the output and transmitted to the processor.

7. The device according to claim **5**, wherein the processor generates the output signal, wherein a constant value is output as the output signal in the case of a signal strength less than a first stored threshold value, and otherwise the position signal is output as the output signal.

8. The device according to claim **5**, wherein the processor generates the output signal in accordance with a distinction between cases, wherein a constant value is output as the output signal in the case of a position signal greater than a second stored threshold value or in the case of a signal strength less than a third stored threshold value, and otherwise the position signal is output as the output signal.

9. The device according to claim **1**, wherein the sensor and the processor form a single component.

10. A method for operating a device according to claim **1**, the method comprising:

reading in by the processor at least one sensor signal at an input and outputting an output signal at the output; and

generating by the processor the output signal as a function of the at least one sensor signal,

wherein the output signal takes on values that are unambiguously associated with a position of the magnet relative to the sensor in the first position range, and takes on a constant value that is independent of the position of the magnet relative to the sensor in the second position range.

11. The method for operating a device according to claim **10**, wherein the sensor detects at least two spatial components of the magnetic field, and wherein a gradient is determined from each of the at least two spatial components of the magnetic field by the sensor and is provided at the output as sensor signals.

12. The method for operating a device according to claim **10**, wherein a position signal is calculated from the sensor signals.

13. The method for operating a device according to claim **10**, wherein a signal strength is calculated from the sensor signals.

14. The method for operating a device according to claim **10**, wherein the processor generates the output signal, wherein a constant value is output as the output signal in the case of a signal strength less than a first stored threshold value, and otherwise the position signal is output as the output signal.

15. The method for operating a device according to claim **10**, wherein the processor generates the output signal in accordance with a distinction between cases, wherein a constant value is output as the output signal in the case of a position signal greater than a second stored threshold value or in the case of a signal strength less than a third stored threshold value, and otherwise the position signal is output as the output signal.

16. A vehicle comprising a device according to claim **1**.

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