the pole of the switch is coupled to a first input of the voltage measurement circuit,

the second input of the voltage measurement circuit is coupled to a node between the first and second resistive elements, and

the voltage measurement circuit is configured to measure a voltage across its first and second inputs,

the method comprising using the measured voltage to calculate charging and discharging of a battery coupled to the battery terminal.

28. The method of claim **27**, wherein the switch comprises a control input and is configured to connect the pole and the second throw together when a charging voltage is present at the charging terminal.

29. The method of claim **28**, wherein the control input of the switch is coupled to a mid-point of a voltage divider that is coupled between the charging terminal and ground potential.

30. The method of claim **28**, wherein the control input of the switch is coupled to a controller that is configured to provide a control signal depending on whether charging is or is not required.

31. The method of claim **27**, further comprising determining current from signals provided by the voltage measurement circuit.

32. The method of claim **27**, further comprising integrating measured voltage or calculated current.

33. The method of claim **32**, further comprising determining remaining capacity of a battery coupled to the battery terminal based at least in part on the integrated voltage or current.

34. A computer program comprising instructions that when executed by apparatus comprising:

a charging terminal for connection to a source of charging current;

a battery terminal for connection to a battery;

a first resistive element;

a second resistive element;

a switch having a single pole and first and second throws; and

a voltage measurement circuit having first and second inputs,

wherein:

the first throw of the switch is coupled to a node between the battery terminal and the second resistive element,

the second throw of the switch is coupled to a node between the charging terminal and the first resistive element,

the first resistive element is coupled between the charging terminal and the second resistive element,

the second resistive element is coupled between the battery terminal and the first resistive element,

the pole of the switch is coupled to a first input of the voltage measurement circuit,

the second input of the voltage measurement circuit is coupled to a node between the first and second resistive elements, and

the voltage measurement circuit is configured to measure a voltage across its first and second inputs,

control the apparatus to perform the method of claim **28**.

35. A non-transitory computer-readable storage medium having stored thereon computer-readable code, which, when executed by computing apparatus comprising at least one processor, at least one memory having stored therein computer code, and:

a charging terminal for connection to a source of charging current;

a battery terminal for connection to a battery;

a first resistive element;

a second resistive element;

a switch having a single pole and first and second throws; and

a voltage measurement circuit having first and second inputs,

wherein:

the first throw of the switch is coupled to a node between the battery terminal and the second resistive element,

the second throw of the switch is coupled to a node between the charging terminal and the first resistive element,

the first resistive element is coupled between the charging terminal and the second resistive element,

the second resistive element is coupled between the battery terminal and the first resistive element,

the pole of the switch is coupled to a first input of the voltage measurement circuit,

the second input of the voltage measurement circuit is coupled to a node between the first and second resistive elements, and

the voltage measurement circuit is configured to measure a voltage across its first and second inputs,

causes the computing apparatus to perform a method comprising using the measured voltage to calculate charging and discharging of a battery coupled to the battery terminal.

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