

EXHIBIT 1



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(12) **United States Patent**
Finkenzeller

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(54) **COMMUNICATION APPARATUS FOR SETTING UP A DATA CONNECTION BETWEEN INTELLIGENT DEVICES**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 1131 days.

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H04Q 5/22 (2006.01)

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340/658; 340/13.2

(58) **Field of Classification Search** 340/10.1-10.6,
340/539.23, 686.6, 658, 13.2, 101; 455/41.1,
455/106

See application file for complete search history.

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Primary Examiner — Daniel Wu

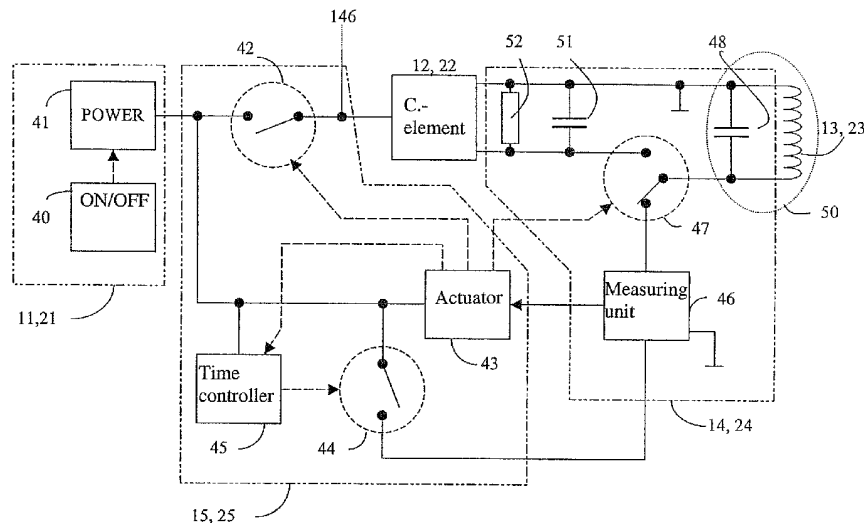
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(57) **ABSTRACT**

The invention relates to a communication apparatus for automatically setting up a data connection between two intelligent devices (10, 20, 30). The apparatus comprises a coil (13, 23, 33) for carrying out a contactless data exchange which is part of a transmission oscillator (50), a communication element (12, 22) which is connected to the coil (13, 23, 33) and the data processing component (11, 21) of an intelligent device (10, 20, 30) and emits search signals via the coil (13, 23, 33) to receive a response from another intelligent device (10, 20, 30), a measuring device (14, 24) for monitoring a property of the transmission oscillator (50), which outputs a control signal when ascertaining a change in the monitored property, and a switching apparatus (15, 25) which is connected to the measuring device (14, 24) and the communication element (12, 22) and which switches on the communication element (12, 22) when it has received a control signal from the measuring device (14, 24).

17 Claims, 6 Drawing Sheets



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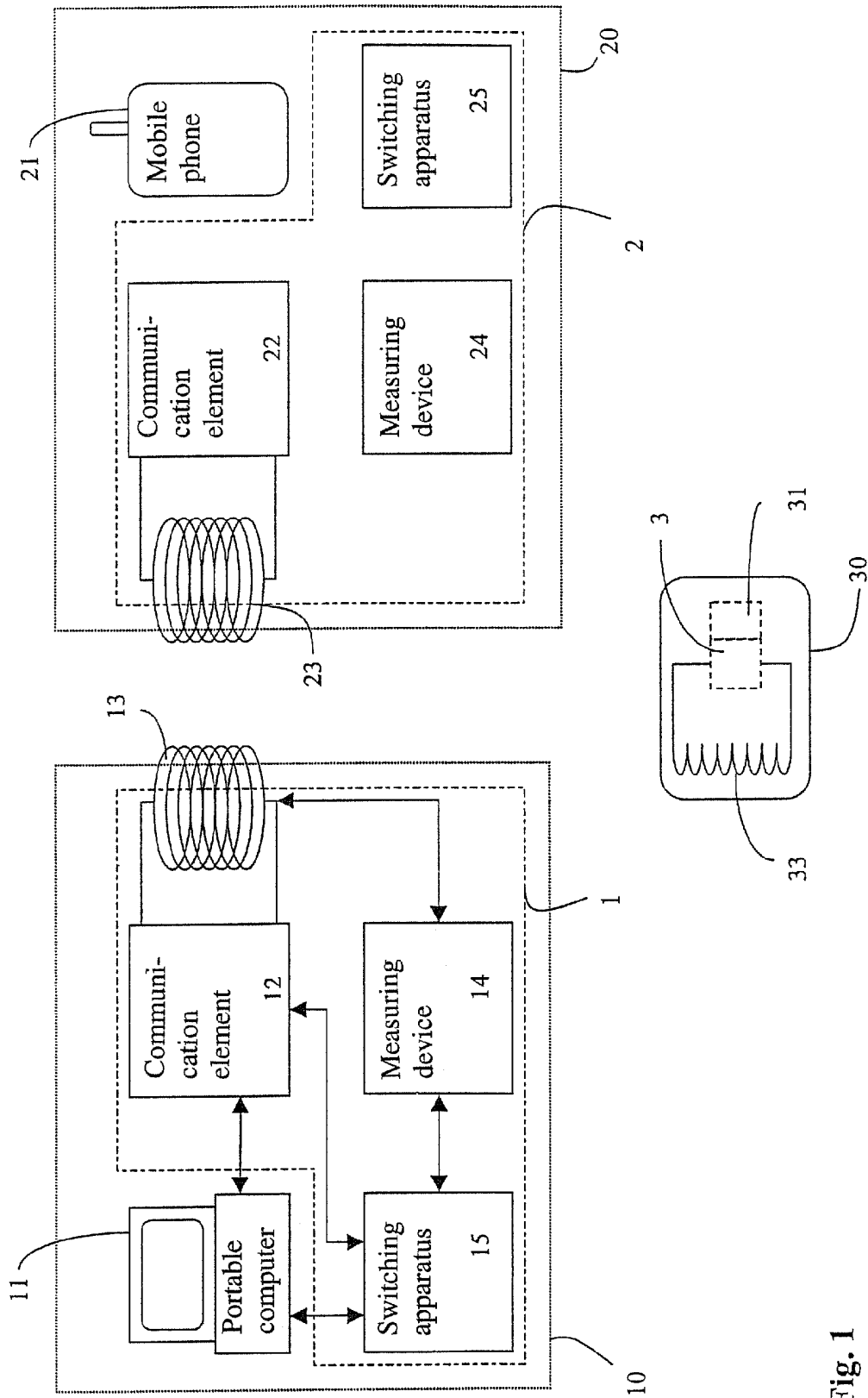


Fig. 1

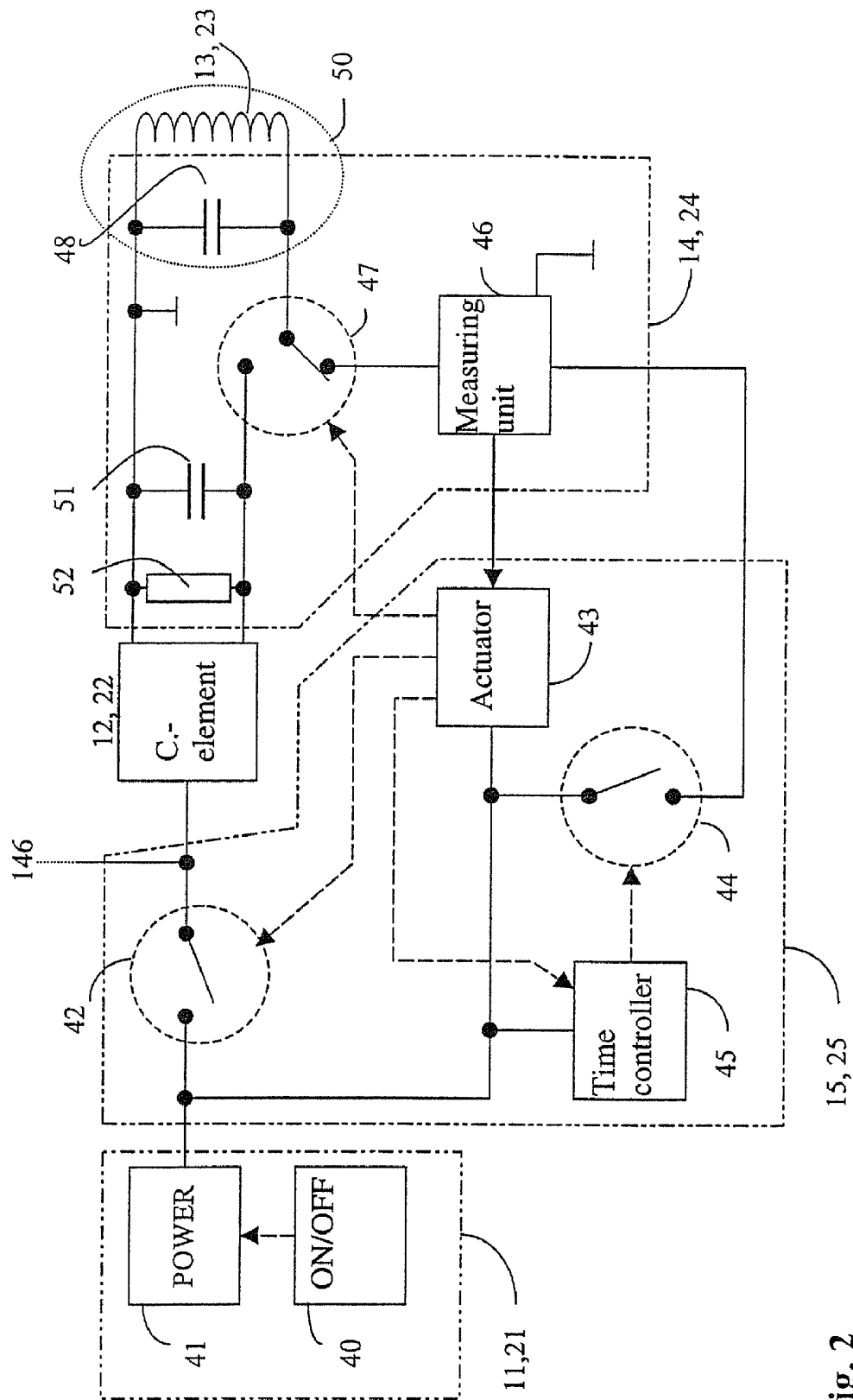


Fig. 2

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