



(57) Abrégé(suite)/Abstract(continued):

assembly. A positive capacitive element is disposed in the second insulator and is separated from the negative capacitive element by the second insulator. The positive capacitive element is coupled to the positive electrode. The positive and negative capacitive elements form a capacitor. A resistor is coupled to the positive capacitive element. An electrical connector is coupled to the resistor and attached to the second insulator. A shell including a negative electrode having a tip is attached to the second insulator and the firing cone assembly and coupled to the negative capacitive element. The negative electrode tip is spaced apart from the positive electrode tip.

5

ABSTRACT

A composite ignition device includes a positive electrode having a tip formed thereon that is bonded to a first insulator to form a firing cone assembly. A second insulator having a negative capacitive element embedded therein is attached to the firing cone assembly. A positive capacitive element is disposed in the second insulator and is separated from the negative capacitive element by the second insulator. The

WO2007/134296

PCT/US2007/068897

5

COMPOSITE SPARK PLUG

5

2

5

3

5A

5

5 Alternatively, the first insulator

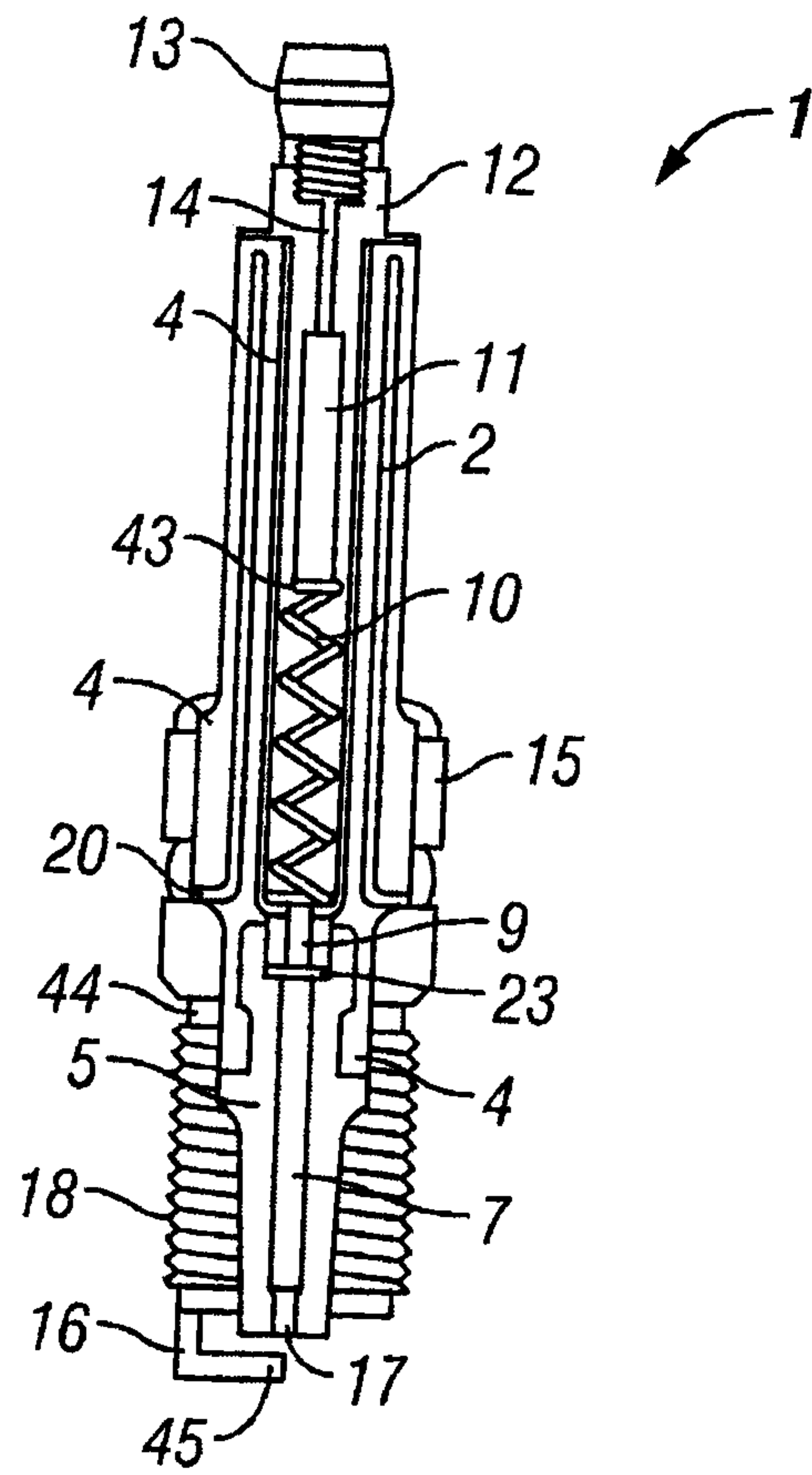
5

pat

wherein the negative capacitive element comprises at least one flange extending radially
therefrom, wherein the flange comprises at least one scallop to ensure a complete flow of the second
5 insulator around the negative capacitive element.

10

15



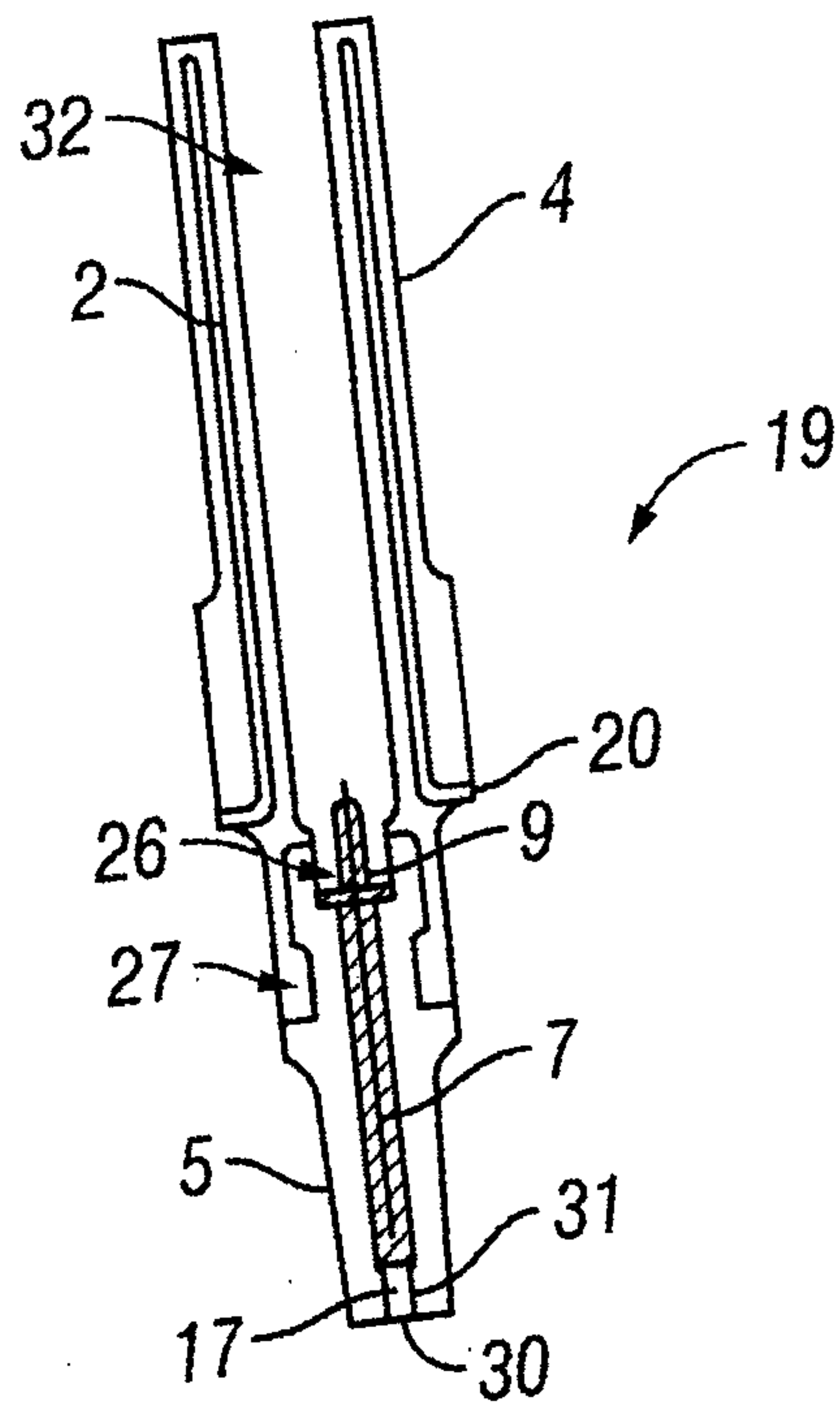


FIG. 5

