

Title (en)
FILTER ELEMENT AND FILTER ARRANGEMENT

Title (de)
FILTERELEMENT UND FILTERANORDNUNG

Title (fr)
ÉLÉMENT FILTRANT ET SYSTÈME DE FILTRATION

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Abstract (en)
[origin: WO2015043755A1] The invention relates to a filter element (1), in particular in the form of a filter candle for removing dust from industrial gases, and to a filter arrangement (100) in which the filter element (1) is used. The filter element (1) according to the invention comprises a filter body (10) and an outer skeleton (30). The filter element (10) extends in an extension direction or longitudinal direction (z) in an elongated form. The outer skeleton (30) is formed on or attached to the outside of the filter body (10) in such a way that the filter body (10) is thus supported on the outer skeleton (30) and therefore is mechanically relieved and stabilized with respect to tension, compression, bending, and/or torsion in comparison with an arrangement without an outer skeleton. In the filter arrangement (100) according to the invention, an unfiltered-gas chamber (110) and a filtered-gas chamber (120) are connected to each other in a fluid-mechanical manner by means of one or more filter elements (1) according to the invention in such a way that, during operation, gas in filtered form passes into the filtered-gas chamber (120) when unfiltered gas passes from the unfiltered-gas chamber (110) through the one or more filter elements (1).

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