

Title (en)
PYROLYSIS DEVICE

Title (de)
PYROLYSEVORRICHTUNG

Title (fr)
DISPOSITIF DE PYROLYSE

Publication
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Application
EP 19712847 A 20190228

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• IT 201800003163 A 20180301
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Abstract (en)
[origin: WO2019166980A1] A pyrolysis device (1; 200) comprising an elongated tubular structure (2; 201) which extends along a longitudinal axis (X) and includes a first tubular body (3; 202) which defines an initial washing or drainage chamber, in which a shaped carriage (5; 204) containing a polymeric material to be subjected to pyrolysis thermal treatment is received, and provided with a movable front shutter (8; 207), arranged at an axial inlet mouth (9) through which the shaped carriage (5; 204) is introduced into the initial chamber (4; 203), and cooperating with first actuating means (1 0; 209) which alternately move them at least between a first position, in which the front shutter (8; 207) closes the initial chamber (4; 203) from the outer side (4a), and a second position, in which the front shutter (8; 207) opens the initial chamber (4; 203) from such an outer side (4a) putting it into communication with the external environment. The pyrolysis device (1; 200) further comprises a second tubular body (11; 210), located downstream of the first tubular body (3; 202) and provided at a first end (11 a) with closing means (12; 211), defining a pyrolysis chamber (13; 212) which receives the shaped carriage (5; 204) to be subjected to the pyrolysis treatment, interface chimneys (6, 7; 225) for replacing the air present in the initial chamber (4; 203) and/or in the pyrolysis chamber (13; 212) with an inert gas, one or more microwave heating sources (14; 213) coupled to the second tubular body (11; 210) and facing the pyrolysis chamber (13; 212) in which they activate the pyrolysis treatment on the polymeric material present in the shaped carriage (5; 204), and a movable center shutter (15; 214) interposed between the first tubular body (3; 203) and the second tubular body (11; 210) and cooperating with second actuating means (1 6) which alternately move it between a closing position, in which the center shutter (15; 214) keeps the initial chamber (4; 203) and the pyrolysis chamber (13; 212) mutually isolated, and an opening position in which the center shutter (15; 214) puts the initial chamber (4) into communication with the pyrolysis chamber (13), thus allowing the passage of the shaped carriage (5; 204).

IPC 8 full level
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See references of WO 2019166980A1

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