EP2679749B1 – Auxiliary Request 1 for Post Grant Amendment under Section 27

1. An anti-break lock comprising:

a case (1) having a body (11) and a fixing hole (111) defined through the body (11), two rods (12) respectively extending from two ends of the body (11) for connection to respective sleeves (7) and two rings (13) extending radially from the body (11) for connection to respective cores (5), an axis of the rings (13) and an axis of the rods (12) being parallel to each other, a space (14) defined between the two rings (13),

the body (11) having at least one passage (15) which communicates with one of the rings (13), the ring (13) being engaged with an engaging block (2), the engaging block (2) having a recess (21) which is located corresponding to the at least one passage (15) and smaller than the at least one passage, a pad (3) being engaged with the recess (21), the at least one passage (15) being located at an end of the body (11) and a resilient member (151) and a stop pin (152) being received in the at least one passage (15), the resilient member (151) biasing the stop pin (152) which has a first shoulder (1521) defined in a first end thereof which faces the resilient member (151), a second shoulder (1522) being defined in a second end of the stop pin (152) and located corresponding to the at least one passage (15) and the recess (21), a contact portion (1523) extending from the second shoulder (1522) and being located corresponding to the recess (21), the body (11) having a room (16) which communicates with the at least one passage (15), a resilient piece (161) and an engaging member (162) being received in the room (16), the engaging member (162) being located corresponding to the first shoulder (1521) and biased by the resilient piece (161) to contact the stop pin (152), the contact portion (1523) contacting the pad (3) which is removed from the recess (21) when a core (5) is taken out, the stop pin (152) being then pushed by the resilient member (151) to insert the contact portion (1523) into the recess (21), the stop pin (152) being then removed from the room (16), the engaging member (162) being biased by the resilient piece (161) and passing through a conjunction portion between the at least one passage (15) and the room (16), the first shoulder of the stop pin (152) being stopped by the engaging member (162) and not being able to move to its initial position, desired lengths and numbers of the sleeves (7) and the cores (5) can be assembled, the two rods (12) being connected to two sleeves (7) of different lengths, the engaging blocks (2) and the driving members (6) being connected with the cores (5) of different lengths, the sleeves (7) having received the cores (5).

- 2. The lock as claimed in claim 1, wherein a cam (4) is located in the space (14) and connected to the engaging block (2), the engaging block (2) has the core (5) installed thereto which is located corresponding to the cam (4), the pad (3) is pushed by the contact portion (1523) and in contact with the core (5), the engaging block (2) has a stepped surface (22) in axial direction and a slot (23), a driving member (6) is located in the engaging block (2) and has a protrusion (61) located corresponding to the slot (23), the cam (4) has an engaging portion (41) which is located corresponding to the stepped surface (22), the engaging block (2) and the cam (4) are connected to each other, the cam (4) has an insertion path (42) defined in an inner periphery thereof and the insertion path (42) is located corresponding to the protrusion (61), the core (5) has a slide slot (51) which is located at an end of the core (5), the end is connected to the engaging block (2), the slide slot (51) is located corresponding to the protrusion (61).
- 3. The lock as claimed in claim 2, wherein the body (11) has two passages which are located symmetrically to each other and the engaging blocks (2) are engaged with the rings (13), the engaging blocks (2) are located symmetrically to each other, each of the cores (5) has a push member (62a) which contacts the driving member (6) and the two driving members (6) are located symmetrically to each other, each of the driving members (6) has a central hole (63) and a link (64) extends through the central holes (63) so as to move the driving members (6), when one of the push members (62a) is pushed, the driving member (6a) pushes the protrusion (61b) of the other driving member (6) to be removed from the insertion path (42).
- 4. The lock as claimed in claim 1, wherein the sleeve (7) is connected to the rod (12) which has at least one pin hole (121), the sleeve (7) has a connection hole (71) which is located corresponding to the at least one pin hole (121), a positioning (72) extends through the at least one pin hole (121) and the connection hole (71).
- 5. The lock as claimed in claim 1, wherein the rod (12) has the sleeve (7) mounted thereto which receives the core (5), the rings (13) are respectively mounted to the cores, the sleeve (7) has at least one slit (73) and the core has a groove (52) which is located corresponding to the at least one slit (73), the groove (52) has a positioning plate (8) extending therefrom and the positioning plate (8) reaches the sleeve (7), the positioning plate (8) has two notches (82), the groove (52) has two locking pieces (81) on two ends thereof and the locking pieces (1) are fixed to the notches (82).