

Title (en)
Swing type excavator

Title (de)
Schwenkbagger

Title (fr)
Pelle du type pivotant

Publication
EP 0900886 A2 19990310 (EN)

Application
EP 98122113 A 19950307

Priority
• EP 95103250 A 19950307
• JP 3606294 A 19940307
• JP 3606394 A 19940307

Abstract (en)
In a swing type excavator a horizontal pin 31 as the coupling point between boom 14 and the swing post 13 is positioned rearwardly of a swing pin 30 as the swing center of the swing post 13 away from the front attachment. With this arrangement, the so-called ultra-small or undercarriage-width turn is realized without reducing both the side ditch distance in a side ditch digging condition and the maximum digging depth in a deep digging posture. Also, a swing post 13 is attached to an upper structure 11, which is able to turn within a width of an undercarriage 10, at a position forwardly and laterally of a cab 12. A front attachment 1, including a bucket 22, an arm 19, an upper boom 17, a lower boom 14 and a cross link 15, is mounted to the swing post 13. The cross link 15 intersects a line connecting a coupling point between the upper boom 17 and the lower boom 14 and a coupling point between the lower boom 14 and the swing post 13, and changes an opening angle between the upper boom 17 and the lower boom 14 depending on a vertical tilt angle of the lower boom 14. With this arrangement, the upper structure including the front attachment can be turned within the undercarriage width by a simple construction with no need of using a complex link mechanism, and interference between the front attachment and the cab can be easily avoided when the front attachment is swung. <IMAGE>

IPC 1-7
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IPC 8 full level
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Citation (applicant)
• JP H0446149 U 19920420
• JP H0547798 U 19930625
• JP H02120427 A 19900508 - KUBOTA LTD
• JP H02213525 A 19900824 - HITACHI CONSTRUCTION MACHINERY
• JP H0284857 U 19900702

Cited by
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EP 0671511 A2 19950913; **EP 0671511 A3 19960214**; **EP 0671511 B1 20000126**; DE 69514699 D1 20000302; DE 69514699 T2 20000531; DE 69533115 D1 20040708; DE 69533115 T2 20040930; EP 0900886 A2 19990310; EP 0900886 A3 20010131; EP 0900886 B1 20040602

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