

Title (en)
Swing type excavator

Title (de)
Schwenkbagger

Title (fr)
Pelle du type pivotant

Publication
EP 0900886 A3 20010131 (EN)

Application
EP 98122113 A 19950307

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

Abstract (en)
[origin: EP0671511A2] In a swing type excavator, 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. Also, 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. <IMAGE>

IPC 1-7
E02F 3/30; **E02F 3/32**; **E02F 3/38**

IPC 8 full level
E02F 3/30 (2006.01); **E02F 3/32** (2006.01); **E02F 3/38** (2006.01); **E02F 9/20** (2006.01); **E02F 3/34** (2006.01); **E02F 3/42** (2006.01)

CPC (source: EP)
E02F 3/301 (2013.01); **E02F 3/302** (2013.01); **E02F 3/32** (2013.01); **E02F 3/325** (2013.01); **E02F 3/384** (2013.01); **E02F 9/2033** (2013.01); **E02F 3/307** (2013.01)

Citation (search report)
• [A] GB 2134070 A 19840808 - ORENSTEIN & KOPPEL AG
• [A] PATENT ABSTRACTS OF JAPAN vol. 013, no. 071 (M - 799) 17 February 1989 (1989-02-17)
• [AP] PATENT ABSTRACTS OF JAPAN vol. 018, no. 579 (M - 1698) 7 November 1994 (1994-11-07)

Cited by
CN103397671A

Designated contracting state (EPC)
DE FR GB IT NL

DOCDB simple family (publication)
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

DOCDB simple family (application)
EP 95103250 A 19950307; DE 69514699 T 19950307; DE 69533115 T 19950307; EP 98122113 A 19950307