

Title (en)
Intuitive joystick control for a work implement.

Title (de)
Intuitiver Steuerhebel für ein Arbeitsgerät.

Title (fr)
Lever de commande intuitif pour un outil d'un engin de terrassement.

Publication
EP 0361666 B1 19940302 (EN)

Application
EP 89308347 A 19890817

Priority
US 24165488 A 19880908

Abstract (en)
[origin: EP0361666A1] Two multi-axis joysticks (23,24), one horizontal and the other upright, provide the operator of a material handling vehicle with an intuitive control interface to the vehicle (34). The control system (10) also provides a coordinated control for spatial placement of the working device (14) of the work implement (11). Movement up and down and in and out being controlled by the horizontal joystick (23) as is the movement of the working device (14) relative to its adjacent linkage (13). Swinging movement about an upright axis is controlled by the second joystick (24).

IPC 1-7
E02F 9/20; **E02F 9/16**

IPC 8 full level
E02F 3/43 (2006.01); **E02F 9/20** (2006.01); **G05G 13/00** (2006.01)

CPC (source: EP)
E02F 3/437 (2013.01); **E02F 9/2004** (2013.01); **E02F 9/2025** (2013.01)

Cited by
US5160239A; US5424623A; US5576704A; FR2691187A1; EP0628976A1; US5421694A; EP0785311A3; US5924516A; EP2628376A1; US9004218B2; US6289783B1; WO9426988A1; WO9204506A1; WO9508677A1

Designated contracting state (EPC)
BE DE FR GB IT SE

DOCDB simple family (publication)
EP 0361666 A1 19900404; **EP 0361666 B1 19940302**; CA 1314790 C 19930323; DE 68913412 D1 19940407; DE 68913412 T2 19940929; JP H02101511 A 19900413

DOCDB simple family (application)
EP 89308347 A 19890817; CA 608701 A 19890818; DE 68913412 T 19890817; JP 23451589 A 19890908