

Title (en)  
ACTIVE FEEDBACK CONTROL SYSTEM FOR TRANSIENT NARROW-BAND DISTURBANCE REJECTION OVER A WIDE SPECTRAL RANGE

Title (de)  
AKTIVEN RÜCKKOPPLUNGSKONTROLLEANORDNUNG ZUR SCHMALBANDSTÖRUNGSUNTERDRÜCKUNG IN EINEM BREITEN  
SPEKTRALBEREICH

Title (fr)  
SYSTEME ACTIF DE COMMANDE DE RETROACTION POUR REJET DES PERTURBATIONS A BANDE ETROITE TRANSITOIRE SUR UNE  
LARGE PLAGE SPECTRALE

Publication  
**EP 0904035 A1 19990331 (EN)**

Application  
**EP 97927930 A 19970603**

Priority  
• US 9709527 W 19970603  
• US 1916696 P 19960605

Abstract (en)  
[origin: WO9746176A1] A control system provides active attenuation of excitations to a region or structure (1). A feedback sensor (14) generates a signal in response to excitations of the region (1) which is fed to a narrow-band feedback controller (5) having a frequency detector (4), a bandpass filter (6) controlled by the frequency detector (4), and a feedback control generator (8). The frequency detector (4) determines the peak frequency of the excitations. A bandpass filter (6) passes only those signals from the feedback sensor (14) in a narrow frequency band adjustably controlled by the frequency detector (4). The feedback control generator (8) receives the filtered signal from the bandpass filter (6) and produces a control output used by an actuator (13) to attenuate the excitations. Several bandpass filters (6) can be used in parallel to attenuate several frequency bands if the excitation source has a plurality of peaks. This configuration allows the bands to move across the frequency spectrum in response to the excitations.

IPC 1-7  
**A61F 2/20**

IPC 8 full level  
**G10K 11/178** (2006.01)

CPC (source: EP US)  
**G10K 11/17853** (2017.12 - EP US); **G10K 11/17854** (2017.12 - EP US); **G10K 11/17875** (2017.12 - EP US); **G10K 11/17879** (2017.12 - EP US);  
**G10K 11/17883** (2017.12 - EP US); **G10K 2210/121** (2013.01 - EP); **G10K 2210/125** (2013.01 - EP); **G10K 2210/1281** (2013.01 - EP);  
**G10K 2210/1282** (2013.01 - EP); **G10K 2210/3025** (2013.01 - EP); **G10K 2210/3026** (2013.01 - EP); **G10K 2210/3053** (2013.01 - EP);  
**G10K 2210/511** (2013.01 - EP)

Designated contracting state (EPC)  
BE DE DK ES FR GB IT NL PT SE

DOCDB simple family (publication)  
**WO 9746176 A1 19971211**; CA 2247808 A1 19971211; EP 0904035 A1 19990331; EP 0904035 A4 19990929

DOCDB simple family (application)  
**US 9709527 W 19970603**; CA 2247808 A 19970603; EP 97927930 A 19970603