

Title (en)  
TRAIN PROXIMITY DETECTOR

Title (de)  
NÄHERUNGSDETEKTOR FÜR ZÜGE

Title (fr)  
DETECTEUR DE PROXIMITE D'UN TRAIN

Publication  
**EP 0870289 A4 19990310 (EN)**

Application  
**EP 96945646 A 19961224**

Priority  
• US 9620602 W 19961224  
• US 944195 P 19951229  
• US 60035196 A 19960212

Abstract (en)  
[origin: CA2241520A1] Disclosed is a train proximity detector, for detecting an RF carrier transmitted by a train, for a predefined period of time. Further, the encoded FSK data is decoded to determine if a match with a predefined data signature exists. If a match exists, visual (44) and audio (40) indications are provided to the operator, indicating a close proximity of a train. Modifications to train equipment can be made to cause the transmission of the carrier and FSK data on the activation of the train whistle (160), which is about 1500 feet from every crossing.

IPC 1-7  
**G08G 1/01**

IPC 8 full level  
**B61L 29/24** (2006.01); **B61L 29/32** (2006.01); **G08G 1/01** (2006.01); **G08G 1/0965** (2006.01); **G08G 1/16** (2006.01); **H04B 7/26** (2006.01)

CPC (source: EP)  
**B61L 29/246** (2013.01); **G08G 1/0965** (2013.01)

Citation (search report)  
• [A] US 4942395 A 19900717 - FERRARI JOHN S [US], et al  
• [A] US 3854119 A 19741210 - FRIEDMAN B, et al  
• [A] US 4296496 A 19811020 - SADLER WILLIAM S  
• See references of WO 9724704A1

Cited by  
CN113377032A

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DE ES FR GB IT SE

DOCDB simple family (publication)  
AU 1687497 A 19970728; AU 715330 B2 20000120; CA 2241520 A1 19970710; CA 2241520 C 20050322; DE 69633191 D1 20040923; EP 0870289 A1 19981014; EP 0870289 A4 19990310; EP 0870289 B1 20040818

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