

Title (en)

MULTI-TRACK TAPE DRIVE WITH REEL END OF TAPE SENSING AND REWIND.

Title (de)

MEHRSPURBANDANTRIEB MIT BANDENDE-ABFUHLUNG AN DER SPULE UND MIT RÜCKLAUF.

Title (fr)

ENTRAINEMENT DE BANDE MULTI-PISTES AVEC DETECTION ET REMBOBINAGE DE LA FIN DE LA BOBINE DE LA BANDE.

Publication

EP 0048271 A4 19841011 (EN)

Application

EP 81901064 A 19810323

Priority

US 13309180 A 19800324

Abstract (en)

[origin: WO8102804A1] A telephone answering device of the reel-to-reel type, in which a pre-recorded broadcast message is on a first portion (184) of at least a first track (1) of a multitrack recording tape (30), and incoming messages are recorded on a second portion (186) of other tracks (2-13) of the multi-track recording tape (30). A sensor (188), such as a foil, a coded recorded interval, a predetermined tone, or the like, is on the recording tape (30) between the first portion (184) and second portion (186). A supply reel (14) and take-up reel (44) are provided, and in the start position, that is, when the device is awaiting the receipt of an incoming call, at least a portion of the tape is wound on the supply reel (14) in a first section thereof. The first section of the supply reel (14) has a pawl (46) mounted thereon, which is restrained to a retracted position by the tape wound thereon. When a call is received, a drive motor (96) engages the take-up reel and moves the tape (30) adjacent both a broadcast head (134), which first transmits the broadcast message to the incoming caller, and also past a recording head (136) which records the message which the incoming caller wishes to leave. When the tape has unwound from the supply reel (14) so that the first section is free of the reel, the pawl (46) mounted on the supply reel (14) extends outwardly and engages an arm (56). Further rotation of the supply reel (14) causes the pawl (46) to move the arm (56). The arm (56) engages ratchet teeth (160) on a multi-level cam (148) and rotates the multi-level cam (148) to position the recording head (136) which bears against the multi-level cam (148) adjacent the next available track for recording an incoming message. Further movement of the arm (56) disengages the drive motor (96) from the take-up reel (44). The arm (56) is resiliently biased to its initial position and resists the movement caused by the pawl (46). The foil sensor (188), which is between the first portion (184) and the second portion (186) of the multi-track recording tape (30) is utilized to activate appropriate electronic circuitry during playback, so that the drive motor (96) may be reengaged each time the foil sensor (188) is detected, thereby allowing rapid listening of all of the recorded messages, without listening to the outgoing broadcast message. Further, manual operation for positioning the record head (136) during playback allows selective positioning thereof adjacent any desired track. The electronic controls also switch the record head (136) to the playback mode during the playback operation.

IPC 1-7

G11B 15/18; **G11B 15/44**

IPC 8 full level

G11B 15/02 (2006.01); **G11B 5/55** (2006.01); **G11B 15/093** (2006.01); **G11B 15/40** (2006.01); **G11B 15/44** (2006.01)

CPC (source: EP)

G11B 15/093 (2013.01); **G11B 15/44** (2013.01)

Citation (search report)

- [X] US 3715504 A 19730206 - PIOTT C
- [A] US 3177768 A 19650413 - HALLAMORE BARRY K
- [A] US 3590159 A 19710629 - WOLF ARNOLD, et al
- [A] US 3426152 A 19690204 - O'HALLORAN TIMOTHY J, et al
- [A] US 3967068 A 19760629 - SHINOHARA ISAO
- [A] US 4006312 A 19770201 - RUBENSTEIN LEONARD, et al

Designated contracting state (EPC)

AT CH DE FR GB LU NL SE

DOCDB simple family (publication)

WO 8102804 A1 19811001; EP 0048271 A1 19820331; EP 0048271 A4 19841011; GB 2074362 A 19811028; GB 2074362 B 19840711; JP S57500579 A 19820401

DOCDB simple family (application)

US 8100372 W 19810323; EP 81901064 A 19810323; GB 8109236 A 19810324; JP 50147381 A 19810323