

Abstract

METHOD AND DEVICE TO TRANSFER A VIDEO STREAM BETWEEN A HOST DEVICE AND AN ELECTRONIC DESCRAMBLING DEVICE

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- The present invention refers to the field of video data transfer to a USB dongle. it is proposed a method to transfer a video stream originating from a one producer, having a producer ID, from a host device to an electronic descrambling device in charge of descrambling said at least one stream, said host device comprising a controller comprising a bulk pipe out and a bulk pipe in transfer, comprising the steps of :
- 10 - for each producer, defining a chunk of data from the video stream,
- forming a chain of out transfer, the chain of out transfer comprising a chain out header (oqH) linked with a plurality of chain out descriptors (oqTD), the first chain out descriptor pointing to a out
- 15 description packet containing the at least one producer ID, the second and subsequent chain out descriptor pointing to the chunk of data, each chunk of data being of a particular producer, and the last chain out descriptor being configured to generate an interrupt,
- forming a chain of in transfer, the chain of in transfer comprising a chain in header (iqH) linked with a plurality of chain in descriptors (iqTD), each chain in descriptor pointing to a descrambled chunk of
- 20 data,
- requesting the controller to process the chain,
- receiving the description packet by the electronic descrambling device and identifying key data associated with the at least one chunk,
- using the key data to descramble the data chunk,
- 25 - receiving by the controller, via the bulk pipe in the descrambled chunk,
- triggering an interrupt by the reception of the last descrambled chunk.

Fig. 2