CLAIMS

[Claim 1]

A communication apparatus that operates as a multi-link device compliant with an Institute of Electrical and Electronics Engineers (IEEE) 802.11 series standard, the communication apparatus comprising:

selection means for selecting an enhanced multi-link multi-radio (EMLMR) link from among a plurality of EMLMR links, based on information about a link of multi-link communication; and

control means for controlling a frame exchange sequence on the selected EMLMR link,

wherein the control means is configured to, in a case where another start frame is received on another EMLMR link different from the selected EMLMR link during a period from when transmission of a start frame on the selected EMLMR link is started to when a first frame is transmitted on the selected EMLMR link after reception of a response frame to the start frame, control the frame exchange sequence to be continued on the selected EMLMR link ([0066], [0069], [0071], [0074]).

[Claim 2]

The communication apparatus according to Claim 1, wherein the selection means is configured to select the EMLMR link based on link identifiers (IDs) assigned to respective links in the multi-link communication.

[Claim 3]

The communication apparatus according to Claim 1, wherein the selection means is configured to select the EMLMR link based on order of establishment of EMLMR links by respective links in the multi-link communication.

[Claim 4]

The communication apparatus according to Claim 1, wherein the selection means is configured to select the EMLMR link based on communication capabilities of respective links in the multi-link communication.

[Claim 5]

The communication apparatus according to any one of Claims 1 to 4, further comprising determination means for determining whether there is a plurality of EMLMR links,

wherein the selection means is configured to perform the selection, based on a determination performed by the determination means that there is a plurality of EMLMR links.

[Claim 6]

The communication apparatus according to Claim 5, wherein, in a case where a frame including an EMLMR Support subfield having a value of 1 is transmitted and received, or a frame including the EMLMR Support subfield having a value of 1 is received and an enhanced multi-link (EML) Operating Mode Notification frame including an EMLMR Mode subfield having a value of 1 is transmitted, or a frame including the EMLMR Support subfield having a value of 1 is transmitted and an EML Operating Mode Notification frame including the EMLMR Mode subfield having a value of 1 is received on a plurality of links, the determination means determines that there is a plurality of EMLMR links.

[Claim 7]

The communication apparatus according to any one of Claims 1 to 6, wherein the control means is configured to control, in a case where the control means controls a frame exchange sequence on the selected EMLMR link, frame exchange after an initial frame is exchanged in a started frame exchange sequence with a number of spatial streams up to a

value defined in an EMLMR Supported Modulation and Coding Scheme (MCS) AND Number of Spatial Streams (NSS) SET subfield by the communication apparatus operating as a non-access point (Non-AP) multi-link device (MLD) or by the another communication apparatus.

[Claim 8]

A control method for controlling a communication apparatus operating as an MLD compliant with an IEEE 802.11 series standard, the control method comprising:

selecting an EMLMR link from among a plurality of EMLMR links based on information about a link of multi-link communication; and

controlling a frame exchange sequence on the selected EMLMR link, wherein the control means is configured to, in a case where another start frame is received on another EMLMR link different from the selected EMLMR link during a period from when transmission of a start frame on the selected EMLMR link is started to when a first frame is transmitted on the selected EMLMR link after reception of a response frame to the start frame, control the frame exchange sequence to be continued on the selected EMLMR link ([0066], [0069], [0071], [0074]).

[Claim 9]

A program for causing a computer to function as the means of the communication apparatus according to any one of Claims 1 to 7.