CLAIMS

What is claimed is:

1. A negotiation method for an operating mode, applied to an initiator for operating mode negotiation and comprising:

sending, by an initiator, an operating mode indication OMI to a responder, wherein the OMI comprises a channel width indication information and a space-time stream number indication information, wherein a capability range of a channel width indicated by the channel width indication information is greater than 160 MHz, and a capability range of the number of space-time streams is indicated by the space-time stream number indication information;

wherein the OMI is carried in control information corresponding to a control subfield, and the control information comprises at least either of the channel width indication information and the space-time stream number indication information, wherein the control subfield comprises a first control subfield and a second control subfield, wherein the first control subfield is an OMI basic indication subfield, and the second control subfield is an OMI extension indication subfield, and the first control subfield and the second control subfield jointly indicate an enhanced OMI; and

performing, by the initiator, transmission with the responder.

2. A communications apparatus, serving as an initiator for operating mode OM negotiation, comprising:

a transceiver, configured to send an operating mode indication OMI to a responder, wherein the OMI comprises a channel width indication information and a space-time stream number indication information, wherein a capability range of a channel width indicated by the channel width indication information is greater than 160 MHz, and a capability range of the number of space-time streams is indicated by the space-time stream number indication information;

wherein the OMI is carried in control information corresponding to a control subfield, and the control information comprises at least either of the channel width indication information and the space-time stream number indication information, wherein the control subfield comprises a first control subfield and a second control subfield, wherein the first control subfield is an OMI basic indication subfield, and the second control subfield is an OMI extension indication subfield, and the first control subfield and the second control subfield jointly indicate an enhanced OMI;

and

a processor, configured to perform transmission with the responder.

3. The method according to claim 1 or the initiator according to claim 2, wherein the number of bits of first channel width indication information that is in control information corresponding to the first control subfield and that indicates a channel width is 2, the number of bits of second channel width indication information that is in control information corresponding to the second control subfield and that indicates a channel width is 1, and a channel width range jointly indicated by the first channel width indication information and the second channel width indication information is 20 MHz to 320 MHz.

4. The method according to claim 1 or 3, or the apparatus according to claim 2 or 3, wherein the number of bits of first space-time stream number indication information that is in the control information corresponding to the first control subfield and that indicates the number of space-time streams is 3, the number of bits of second space-time stream number indication information that is in the control information corresponding to the second control subfield and that indicates the number of space-time streams is 1, and a range of the number of space-time streams jointly indicated by the first space-time stream number indication information and the second space-time stream number indication information is 1 to 8.

5. The method or the apparatus according to claim 4, wherein the number of space-time streams jointly indicated by the first space-time stream number indication information and the second space-time stream number indication information is less than or equal to the number of space-time streams of a preset channel width value.

6. A chip system, comprising at least one processor and an interface, wherein

the processor is configured to run a computer program to perform the method according to any one of claims 1 and 3 to 5.

7. The chip system according to claim 6, wherein the chip system further comprises a memory coupled to the processor, and the memory is configured to store a computer program used to implement the method according to any one of claims 1 and 3 to 5.

8. A computer-readable storage medium, wherein the computer-readable storage medium is configured to store a computer program, and when the computer program is executed, the method according to any one of claims 1 and 3 to 5 is implemented.

9. A program, wherein when the program is executed, the method according to any one of

claims 1 and 3 to 5 is implemented.

10. A communications apparatus, serving as an initiator for operating mode OM negotiation, wherein the communications apparatus is configured to implement the method according to any one of claims 1 and 3 to 5.