CLAIMS:

1. A method of transmitting user input data from a wireless sink device to a wireless source device, the method comprising:

obtaining user input data from an external device;

generating a data packet header, wherein the data packet header identifies the user input data as forwarded user input data;

generating payload data comprising the user input data;

generating a data packet comprising the data packet header and the payload data;

transmitting the data packet to the wireless source device.

2. The method of claim 1, further comprising:

negotiating capabilities of the third party device, with the wireless sink device, via a series of messages.

3. The method of claim 1, further comprising:

as part of establishing a communication session between the wireless source device and the wireless sink device, transmitting an identifier of the third party device from the wireless sink device to the wireless source device.

4. The method of claim 1, further comprising:

as part of establishing a communication session between the wireless source device and the wireless sink device, receiving an identifier of the third party device from the wireless source device.

5. The method of claim 1, wherein the data packet header comprises a field to identify a user input category, and a value of the field is set to indicate the payload data comprises the forwarded user input data.

6. The method of claim 1, wherein the payload data comprises an identifier of the third party device.

7. The method of claim 1, wherein the identifier of the third party device is selected from the group consisting of: an IP address of the third party device, a domain name of the third party device.

8. The method of claim 1, wherein the identifier is generated by the wireless source device and transmitted to the wireless sink device.

9. The method of claim 1, wherein the external device is another wireless sink device.

10. The method of claim 1, wherein the external device is an input device communicatively coupled to the wireless sink device.

11. The method of claim 1, wherein the data packet header is an application layer packet header.

12. The method of claim 1, wherein the data packet is to control audio data or video data of the wireless source device.

13. The method of claim 1, wherein the data packet is transmitted over TCP/IP.

14. A wireless sink device configured to transmit user input data to a wireless source device, the wireless sink device comprising:

a memory storing instructions;

one or more processors configured to execute the instructions, wherein upon execution of the instructions the one or more processors cause:

obtaining user input data from an external device;

generating a data packet header, wherein the data packet header identifies the user input data as forwarded user input data;

generating payload data comprising the user input data;

generating a data packet comprising the data packet header and the payload data;

a transport unit to transmit the data packet to the wireless source device.

15. The wireless sink device of claim 14, wherein upon execution of the instructions the one or more processors further cause:

negotiating capabilities of the third party device, with the wireless sink device, via a series of messages.

16. The wireless sink device of claim 14, wherein upon execution of the instructions the one or more processors further cause:

as part of establishing a communication session between the wireless source device and the wireless sink device, transmitting an identifier of the third party device from the wireless sink device to the wireless source device.

17. The wireless sink device of claim 14, wherein upon execution of the instructions the one or more processors further cause:

as part of establishing a communication session between the wireless source device and the wireless sink device, receiving an identifier of the third party device from the wireless source device.

18. The wireless sink device of claim 14, wherein the data packet header comprises a field to identify a user input category, and a value of the field is set to indicate the payload data comprises the forwarded user input data.

19. The wireless sink device of claim 14, wherein the payload data comprises an identifier of the third party device.

20. The wireless sink device of claim 14, wherein the identifier of the third party device is selected from the group consisting of: an IP address of the third party device, a domain name of the third party device.

21. The wireless sink device of claim 14, wherein the identifier is generated by the wireless source device and transmitted to the wireless sink device.

22. The wireless sink device of claim 14, wherein the external device is another wireless sink device.

23. The wireless sink device of claim 14, wherein the external device is an input device communicatively coupled to the wireless sink device.

24. The wireless sink device of claim 14, wherein the data packet header is an application layer packet header.

25. The wireless sink device of claim 14, wherein the data packet is to control audio data or video data of the wireless source device.

26. The wireless sink device of claim 14, wherein the data packet is transmitted over TCP/IP.

27. A computer-readable storage medium storing instructions that upon execution by one or more processors cause the one or more processors to perform a method of transmitting user input data from a wireless sink device to a wireless source device, the method comprising:

obtaining user input data from an external device;

generating a data packet header, wherein the data packet header identifies the user input data as forwarded user input data;

generating payload data comprising the user input data;

generating a data packet comprising the data packet header and the payload data;

transmitting the data packet to the wireless source device.

28. A wireless sink device configured to transmit user input data to a wireless source device, the wireless sink device comprising:

means for obtaining user input data from an external device;

means for generating a data packet header, wherein the data packet header identifies the user input data as forwarded user input data;

means for generating payload data comprising the user input data;

means for generating a data packet comprising the data packet header and the payload data;

means for transmitting the data packet to the wireless source device.

29. A method of receiving user input data from a wireless sink device at a wireless source device, the method comprising:

receiving a data packet comprising a data packet header and payload data from a wireless sink device;

parsing the data packet header to determine the payload data comprises a forwarded user input command;

parsing the payload data to identify an identification of a third party device;

processing the payload data based on the identification of the third party device.

30. The method of claim 29, further comprising:

negotiating capabilities of the third party device, with the wireless source device, via a series of messages.

31. The method of claim 29, further comprising:

as part of establishing a communication session between the wireless source device and the wireless sink device, transmitting an identifier of the third party device to the wireless source device.

32. The method of claim 29, further comprising:

as part of establishing a communication session between the wireless source device and the wireless sink device, receiving an identifier of the third party device from the wireless source device.

33. The method of claim 29, wherein the data packet header comprises a field to identify a user input category, and a value of the field is set to indicate the payload data comprises the forwarded user input data.

34. The method of claim 29, wherein the identifier of the third party device is selected from the group consisting of: an IP address of the third party device, and a domain name of the third party device.

35. The method of claim 29, wherein the identifier is generated by the wireless source device and transmitted to the wireless sink device.

36. The method of claim 29, wherein the external device is another wireless sink device.

37. The method of claim 29, wherein the external device is an input device communicatively coupled to the wireless sink device.

38. The method of claim 29, wherein the data packet header is an application layer packet header.

39. The method of claim 29, wherein the data packet is to control audio data or video data of the wireless source device.

40. The method of claim 29, wherein the data packet is transmitted over TCP/IP.

41. A wireless source device configured to receive user input data from a wireless sink device, the wireless source device comprising:

a transport unit configured to receive a data packet comprising a data packet header and payload data from a wireless sink device;

a memory storing instructions;

one or more processors configured to execute the instructions, wherein upon execution of the instructions the one or more processors cause:

parsing the data packet header to determine the payload data comprises a forwarded user input command;

parsing the payload data to identify an identification of a third party device;

processing the payload data based on the identification of the third party device.

42. The wireless source device of claim 41, wherein upon execution of the instructions the one or more processor cause:

negotiating capabilities of the third party device, with the wireless source device, via a series of messages.

43. The wireless source device of claim 41, wherein upon execution of the instruction the one or more processor cause:

as part of establishing a communication session between the wireless source device and the wireless sink device, receiving an identifier of the third party device to the wireless source device.

44. The wireless sink device of claim 41, wherein upon execution of the instructions the one or more processors further cause:

as part of establishing a communication session between the wireless source device and the wireless sink device, receiving an identifier of the third party device from the wireless source device.

45. The wireless source device of claim 41, wherein the data packet header comprises a field to identify a user input category and a value of the field is set to indicate the payload data comprises the forwarded user input data.

46. The wireless source device of claim 41, wherein the identifier of the third party device is selected from the group consisting of: an IP address of the third party device, and a domain name of the third party device.

47. The wireless source device of claim 41, wherein the identifier is generated by the wireless source device and transmitted to the wireless sink device.

48. The wireless source device of claim 41, wherein the external device is another wireless sink device.

49. The wireless source device of claim 41, wherein the external device is an input device communicatively coupled to the wireless sink device.

50. The wireless source device of claim 41, wherein the data packet header is an application layer packet header.

51. The wireless source device of claim 41, wherein the data packet is to control audio data or video data of the wireless source device.

52. The wireless source device of claim 41, wherein the data packet is transmitted over TCP/IP.

53. A computer-readable storage medium storing instructions that upon execution by one or more processors cause the one or more processors to perform a method of receiving user input data from a wireless sink device at a wireless source device, the method comprising:

receiving a data packet comprising a data packet header and payload data from a wireless sink device;

parsing the data packet header to determine the payload data comprises a forwarded user input command;

parsing the payload data to identify an identification of a third party device;

processing the payload data based on the identification of the third party device.

54. A wireless source device configured to receive user input data from a wireless sink device, the wireless source device comprising:

means for receiving a data packet comprising a data packet header and payload data from a wireless sink device;

means for parsing the data packet header to determine the payload data comprises a forwarded user input command;

means for parsing the payload data to identify an identification of a third party device;

means for processing the payload data based on the identification of the third party device.

CLAIMS:

1. A method of transmitting user input data from a wireless sink device to a wireless source device, the method comprising:

obtaining, at the wireless sink device, user input data from a third party device;

generating, at the wireless sink device, a data packet header, wherein the data packet header includes a field to identify the user input data as forwarded user input data;

generating, at the wireless sink device, payload data comprising the user input data;

generating, at the wireless sink device, a data packet comprising the data packet header and the payload data; and

transmitting the data packet from the wireless sink device to the wireless source device.

2. The method of claim 1, further comprising:

negotiating capabilities of the third party device, with the wireless sink device, via a series of messages.

3. The method of claim 1, further comprising:

as part of establishing a communication session between the wireless source device and the wireless sink device, transmitting an identifier of the third party device from the wireless sink device to the wireless source device.

4. The method of claim 1, further comprising:

as part of establishing a communication session between the wireless source device and the wireless sink device, receiving an identifier of the third party device from the wireless source device.

5. The method of claim 1, wherein a value of the field is set to indicate the payload data comprises the forwarded user input data.

6. The method of claim 1, wherein the payload data comprises an identifier of the third party device.

7. The method of claim 1, wherein the identifier of the third party device is selected from the group consisting of: an IP address of the third party device, a domain name of the third party device.

8. The method of claim 1, wherein the identifier is generated by the wireless source device and transmitted to the wireless sink device.

9. The method of claim 1, wherein the third party device includes:

a. another wireless sink device; or

b. an input device communicatively coupled to the wireless sink device.

10. The method of claim 1, wherein the data packet header is an application layer packet header.

11. The method of claim 1, wherein the data packet is to control audio data or video data of the wireless source device.

12. The method of claim 1, wherein the data packet is transmitted over TCP/IP.

13. A wireless sink device configured to transmit user input data to a wireless source device, the wireless sink device comprising:

a memory storing instructions;

one or more processors configured to execute the instructions, wherein upon execution of the instructions the one or more processors cause:

obtaining, at the wireless sink device, user input data from a third party device;

generating, at the wireless sink device, a data packet header, wherein the data packet header includes a field to identify the user input data as forwarded user input data;

generating, at the wireless sink device, payload data comprising the user input data;

generating, at the wireless sink device, a data packet comprising the data packet header and the payload data;

a transport unit to transmit the data packet from the wireless sink device to the wireless source device.

14. The wireless sink device of claim 13, wherein upon execution of the instructions the one or more processors further cause:

negotiating capabilities of the third party device, with the wireless sink device, via a series of messages.

15. The wireless sink device of claim 13, wherein upon execution of the instructions the one or more processors further cause:

as part of establishing a communication session between the wireless source device and the wireless sink device, transmitting an identifier of the third party device from the wireless sink device to the wireless source device.

16. The wireless sink device of claim 13, wherein upon execution of the instructions the one or more processors further cause:

as part of establishing a communication session between the wireless source device and the wireless sink device, receiving an identifier of the third party device from the wireless source device.

17. The wireless sink device of claim 13, wherein a value of the field is set to indicate the payload data comprises the forwarded user input data.

18. The wireless sink device of claim 13, wherein the payload data comprises an identifier of the third party device.

19. The wireless sink device of claim 13, wherein the identifier of the third party device is selected from the group consisting of: an IP address of the third party device, a domain name of the third party device.

20. The wireless sink device of claim 13, wherein the identifier is generated by the wireless source device and transmitted to the wireless sink device.

21. The wireless sink device of claim 13, wherein the third party device includes:

a. another wireless sink device; or

b. an input device communicatively coupled to the wireless sink device.

22. The wireless sink device of claim 13, wherein the data packet header is an application layer packet header.

23. The wireless sink device of claim 13, wherein the data packet is to control audio data or video data of the wireless source device.

24. The wireless sink device of claim 13, wherein the data packet is transmitted over TCP/IP.

25. A wireless sink device configured to transmit user input data to a wireless source device, the wireless sink device comprising:

means for obtaining, at the wireless sink device, user input data from a third party device;

means for generating, at the wireless sink device, a data packet header, wherein the data packet header includes a field to identify the user input data as forwarded user input data;

means for generating, at the wireless sink device, payload data comprising the user input data;

means for generating, at the wireless sink device, a data packet comprising the data packet header and the payload data; and

means for transmitting the data packet from the wireless sink device to the wireless source device.

26. A method of receiving user input data from a wireless sink device at a wireless source device, the method comprising:

receiving, at the wireless source device, a data packet comprising a data packet header and payload data from a wireless sink device, wherein the data packet header includes a field to identify the user input data as forwarded user input data;

parsing, at the wireless source device, the data packet header to determine the payload data comprises a forwarded user input command;

parsing, at the wireless source device, the payload data to identify an identification of a third party device; and

processing, at the wireless source device, the payload data based on the identification of the third party device.

27. The method of claim 26, further comprising:

negotiating capabilities of the third party device, with the wireless source device, via a series of messages.

28. The method of claim 26, further comprising:

as part of establishing a communication session between the wireless source device and the wireless sink device, transmitting an identifier of the third party device to the wireless source device.

29. The method of claim 26, further comprising:

as part of establishing a communication session between the wireless source device and the wireless sink device, receiving an identifier of the third party device from the wireless source device.

30. The method of claim 26, wherein a value of the field is set to indicate the payload data comprises the forwarded user input data.

31. The method of claim 26, wherein the identifier of the third party device is selected from the group consisting of: an IP address of the third party device, and a domain name of the third party device.

32. The method of claim 26, wherein the identifier is generated by the wireless source device and transmitted to the wireless sink device.

33. The method of claim 26, wherein the third party device includes:

a. another wireless sink device; or

b. an input device communicatively coupled to the wireless sink device.

34. The method of claim 26, wherein the data packet header is an application layer packet header.

35. The method of claim 26, wherein the data packet is to control audio data or video data of the wireless source device.

36. The method of claim 26, wherein the data packet is transmitted over TCP/IP.

37. A wireless source device configured to receive user input data from a wireless sink device, the wireless source device comprising:

a transport unit configured to receive a data packet comprising a data packet header and payload data from a wireless sink device, wherein the data packet header includes a field to identify the user input data as forwarded user input data;

a memory storing instructions;

one or more processors configured to execute the instructions, wherein upon execution of the instructions the one or more processors cause:

parsing, at the wireless source device, the data packet header to determine the payload data comprises a forwarded user input command;

parsing, at the wireless source device, the payload data to identify an identification of a third party device; and

processing, at the wireless source device, the payload data based on the identification of the third party device.

38. The wireless source device of claim 37, wherein upon execution of the instructions the one or more processor cause:

negotiating capabilities of the third party device, with the wireless source device, via a series of messages.

39. The wireless source device of claim 37, wherein upon execution of the instruction the one or more processor cause:

as part of establishing a communication session between the wireless source device and the wireless sink device, receiving an identifier of the third party device to the wireless source device.

40. The wireless sink device of claim 37, wherein upon execution of the instructions the one or more processors further cause:

as part of establishing a communication session between the wireless source device and the wireless sink device, receiving an identifier of the third party device from the wireless source device.

41. The wireless source device of claim 37, wherein a value of the field is set to indicate the payload data comprises the forwarded user input data.

42. The wireless source device of claim 37, wherein the identifier of the third party device is selected from the group consisting of: an IP address of the third party device, and a domain name of the third party device.

43. The wireless source device of claim 37, wherein the identifier is generated by the wireless source device and transmitted to the wireless sink device.

44. The wireless source device of claim 37, wherein the third party device includes:

a. another wireless sink device; or

b. an input device communicatively coupled to the wireless sink device.

45. The wireless source device of claim 37, wherein the data packet header is an application layer packet header.

46. The wireless source device of claim 37, wherein the data packet is to control audio data or video data of the wireless source device.

47. The wireless source device of claim 37, wherein the data packet is transmitted over TCP/IP.

48. A computer-readable storage medium storing instructions that upon execution by one or more processors cause the one or more processors to perform a method according to any one of claims 1 to 12 or 26 to 36.

49. A wireless source device configured to receive user input data from a wireless sink device, the wireless source device comprising:

means for receiving, at the wireless source device, a data packet comprising a data packet header and payload data from a wireless sink device, wherein the data packet includes a field to identify the user input data as forwarded user input data;

means for parsing, at the wireless source device, the data packet header to determine the payload data comprises a forwarded user input command;

means for parsing, at the wireless source device, the payload data to identify an identification of a third party device; and

means for processing, at the wireless source device, the payload data based on the identification of the third party device.