CLAIMS

1. A method for communication beam transition in a communication system, comprising:

exchanging information between a first communication device and a second communication device on a first communication beam;

receiving beam information from the second communication device on the first communication beam;

sending from the first communication device a beam switch command on the first communication beam, the beam switch command requesting a transition from the first communication beam to a second communication beam;

simultaneously sending information from the first communication device to the second communication device on the first communication beam and the second communication beam; and

ceasing sending information from the first communication device to the second communication device on the first communication beam when transition to the second communication beam is completed by the first communication device and the second communication device.

2. The method of claim 1, wherein simultaneously sending information from the first communication device to the second communication device on the first communication beam and the second communication beam further comprises:

the first communication device failing to receive a beam switch command acknowledgement from the second communication device;

the first communication device resending the beam switch command requesting a transition from the first communication beam to the second communication beam;

the second communication device failing to receive the resent beam switch command;

the second communication device switching to the second communication beam; and

the first communication device communicating with the second communication device over the second communication beam.

3. The method of claim 1, wherein simultaneously sending information from the first communication device to the second communication device on the first communication beam and the second communication beam further comprises:

the second communication device failing to decode the beam switch command;

the second communication device sending a non-acknowledgement (NACK) communication to the first communication device over the first communication beam;

the first communication device decoding the NACK as an acknowledgement (ACK);

the first communication device switching to the second communication beam; and

the first communication device communicating with the second communication device over the first communication beam.

4. The method of claim 1, wherein the first communication device is a base station and the second communication device is a user equipment.

5. The method of claim 2, further comprising ceasing exchanging information between the first communication device and the second communication device on the first communication beam at the expiration of a predetermined number of communication subframes.

6. The method of claim 3, further comprising continuing exchanging information between the first communication device and the second communication device on the first communication beam at the expiration of a predetermined number of communication subframes.

7. The method of claim 1, wherein simultaneously sending information from the first communication device to the second communication device on the first communication beam and the second communication beam further comprises synthesizing a distorted communication beam having the first communication beam and the second communication beam.

8. An apparatus for communication beam transition in a communication system, comprising:

a first communication device and a second communication device configured to exchange information on a first communication beam;

the second communication device configured to send beam information to the first communication device on the first communication beam;

the first communication device configured to send a beam switch command on the first communication beam, the beam switch command requesting a transition from the first communication beam to a second communication beam;

the first communication device configured to simultaneously send information to the second communication device on the first communication beam and the second communication beam; and

the first communication device configured to cease sending information to the second communication device on the first communication beam when transition to the second communication beam is completed by the first communication device and the second communication device.

9. The apparatus of claim 8, further comprising:

the first communication device failing to receive a beam switch command acknowledgement from the second communication device;

the first communication device configured to resend the beam switch command requesting a transition from the first communication beam to the second communication beam;

the second communication device failing to receive the resent beam switch command;

the second communication device configured to switch to the second communication beam; and

the first communication device configured to communicate with the second communication device over the second communication beam.

10. The apparatus of claim 8, further comprising:

the second communication device failing to decode the beam switch command;

the second communication device configured to send a non-acknowledgement (NACK) communication to the first communication device over the first communication beam;

the first communication device decoding the NACK as an acknowledgement (ACK);

the first communication device configured to switch to the second communication beam; and

the first communication device configured to communicate with the second communication device over the first communication beam.

11. The apparatus of claim 8, wherein the first communication device is a base station and the second communication device is a user equipment.

12. The apparatus of claim 9, further comprising a counter, wherein the first communication device and the second communication device are configured to cease exchanging information on the first communication beam at the expiration of a predetermined number of communication subframes stored in the counter.

13. The apparatus of claim 10, further comprising a counter, wherein the first communication device and the second communication device are configured to continue exchanging information on the first communication beam at the expiration of a predetermined number of communication subframes stored in the counter.

14. The apparatus of claim 8, further comprising a distorted communication beam having the first communication beam and the second communication beam.

15. A device, comprising:

means for exchanging information between a first communication device and a second communication device on a first communication beam;

means for receiving beam information from the second communication device on the first communication beam;

means for sending from the first communication device a beam switch command on the first communication beam, the beam switch command requesting a transition from the first communication beam to a second communication beam;

means for simultaneously sending information from the first communication device to the second communication device on the first communication beam and the second communication beam; and

means for ceasing sending information from the first communication device to the second communication device on the first communication beam when transition to the second communication beam is completed by the first communication device and the second communication device.

16. The device of claim 15, wherein the means for simultaneously sending information from the first communication device to the second communication device on the first communication beam and the second communication beam further comprises:

when failing to receive a beam switch command acknowledgement from the second communication device, means for resending the beam switch command requesting a transition from the first communication beam to the second communication beam;

when failing to receive the resent beam switch command, means for switching to the second communication beam; and

means for communicating with the second communication device over the second communication beam.

17. The device of claim 15, wherein the means for simultaneously sending information from the first communication device to the second communication device on the first communication beam and the second communication beam further comprises:

when failing to decode the beam switch command, means for sending a non-acknowledgement (NACK) communication to the first communication device over the first communication beam;

when decoding the NACK as an acknowledgement (ACK), means for switching to the second communication beam; and

means for communicating with the second communication device over the first communication beam.

18. The device of claim 15, wherein the first communication device is a base station and the second communication device is a user equipment.

19. The device of claim 16, further comprising means for counting a predetermined number of communication subframes, after which the first communication device and the second communication device cease exchanging information on the first communication beam.

20. The device of claim 17, further comprising means for counting a predetermined number of communication subframes, after which the first communication device and the second communication device continue exchanging information on the first communication beam.

21. The device of claim 17, further comprising means for synthesizing a distorted communication beam having the first communication beam and the second communication beam.

22. A non-transitory computer-readable medium storing computer executable code for communication beam transition in a communication system, the code executable by a processor to:

exchange information between a first communication device and a second communication device on a first communication beam;

receive beam information from the second communication device on the first communication beam;

send from the first communication device a beam switch command on the first communication beam, the beam switch command requesting a transition from the first communication beam to a second communication beam;

simultaneously send information from the first communication device to the second communication device on the first communication beam and the second communication beam; and

cease sending information from the first communication device to the second communication device on the first communication beam when transition to the second communication beam is completed by the first communication device and the second communication device.

23. The non-transitory computer-readable medium of claim 22, wherein the code is executable by a processor to:

when the first communication device fails to receive a beam switch command acknowledgement from the second communication device, cause the first communication device to resend the beam switch command requesting a transition from the first communication beam to the second communication beam;

when the second communication device fails to receive the resent beam switch command, cause the second communication device to switch to the second communication beam; and

cause the first communication device to communicate with the second communication device over the second communication beam.

24. The non-transitory computer-readable medium of claim 22, wherein the code is executable by a processor to:

when the second communication device fails to decode the beam switch command, cause the second communication device to send a non-acknowledgement (NACK) communication to the first communication device over the first communication beam;

when the first communication device decodes the NACK as an acknowledgement (ACK), cause the first communication device to switch to the second communication beam; and

cause the first communication device to communicate with the second communication device over the first communication beam.

25. The non-transitory computer-readable medium of claim 22, wherein the first communication device is a base station and the second communication device is a user equipment.

26. The non-transitory computer-readable medium of claim 23, wherein the code is executable by a processor to count a predetermined number of communication subframes, after which the first communication device and the second communication device cease exchanging information on the first communication beam.

27. The non-transitory computer-readable medium of claim 24, wherein the code is executable by a processor to count a predetermined number of communication

subframes, after which the first communication device and the second communication device continue exchanging information on the first communication beam.

28. The non-transitory computer-readable medium of claim 22, wherein the code is executable by a processor to synthesize a distorted communication beam having the first communication beam and the second communication beam.