CLAIMS

1. A device for imaging underground features from a borehole, the device comprising:

at least one carriage configured to travel along a borehole in a longitudinal direction;

a first ground-penetrating radar antenna on the at least one carriage;

a transmitter configured to control emission of radiation from the first ground-penetrating radar antenna;

a second ground-penetrating radar antenna on the at least one carriage; and

a receiver configured to accept from the second ground-penetrating radar antenna signals indicative of reception of radiation at the second ground-penetrating radar antenna;

in which:

the at least one carriage comprises a first carriage and a second carriage; and

the first ground-penetrating radar antenna is disposed on the first carriage and the second ground-penetrating radar antenna is disposed on the second carriage such that the first and second ground-penetrating radar antennas are spaced apart from each other; and

the first and second carriages are moveable relative to each other in a longitudinal direction along the borehole such that a spacing between the first and second ground-penetrating radar antennas can be varied.

2. A device according to Claim 1, further comprising a material bridging a distance between the first ground-penetrating radar antenna and/or the second ground-penetrating radar antenna and a wall of the borehole over the entire beam of radiation.

3. A device according to Claim 2, in which the material may be distributed such that any path in the beam from the first ground-penetrating radar antenna and/or the second ground-penetrating radar antenna possesses a total radar time of flight equal to that in any other path in the beam.

4. A device according to Claim 1, 2 or 3, further comprising a further first ground-penetrating radar antenna configured in a similar manner to the first ground-penetrating radar antenna.

5. A method of imaging underground features from a borehole, the method comprising the steps of:

providing a device according to any preceding claim;

passing the at least one carriage along a borehole in a longitudinal direction;

emitting a first beam of radiation from the first ground-penetrating radar antenna;

in response to emitting the first beam of radiation from the first ground-penetrating radar antenna, receiving radiation at the second ground-penetrating radar antenna.