

IMAGING DEVICE AND IMAGING METHOD

[ABSTRACT]

An imaging device (100) includes: one or more transmitter
5 arrays (111) each of which transmits a wave to a measurement area
via a plurality of transmitters (101) that are connected in a first
direction and operate in conjunction with each other; one or more
receiver arrays (112) each of which receives a scattered wave of the
wave from the measurement area via a plurality of receivers (102)
10 that are connected in a second direction different from the first
direction and operate in conjunction with each other; and an
information processing circuit (130) that images an object in the
measurement area using measurement data of the scattered wave.
The information processing circuit (130) derives a scattering field
15 function using the measurement data, derives an imaging function
using the scattering field function, and images the object using the
imaging function.

Figure 11