

Fig 1. (a) The block diagram of non-invasive life signal detecting system used at 1.9GHz and 10 GHz, (b) The real manufactured system

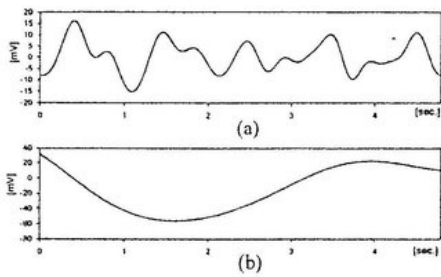


Fig 2. (a) Heart rates and (b) respiration signals at 0.5m, 1.9GHz

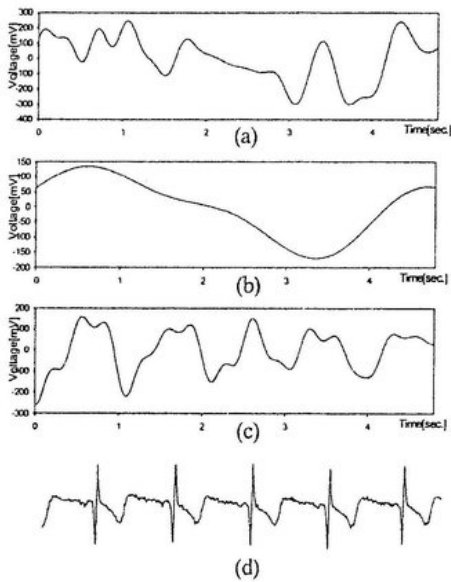


Fig 3. Waveforms at 0.5m, 10GHz (a) Measured signal after 0.03~3.3Hz band pass filter, (b) 0.03~0.5Hz filtering for respiration, (c) 0.6~3.3Hz filtering for heart rates, (d) Electrocardiogram (ECG) signal

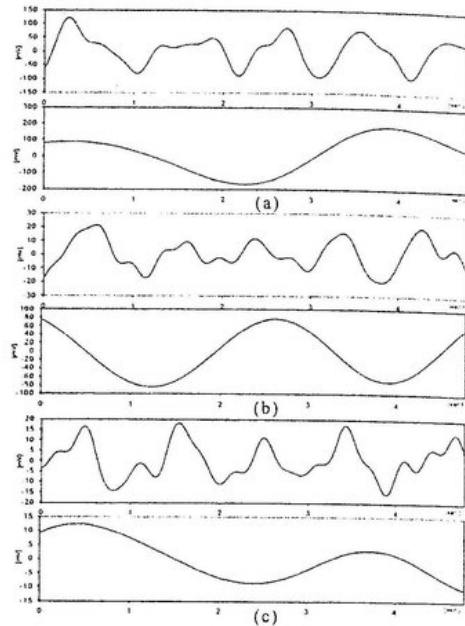


Fig 4. The heart rates and respiration waveforms at (a) 1m, (b) 3m, (c) 5m at 10GHz

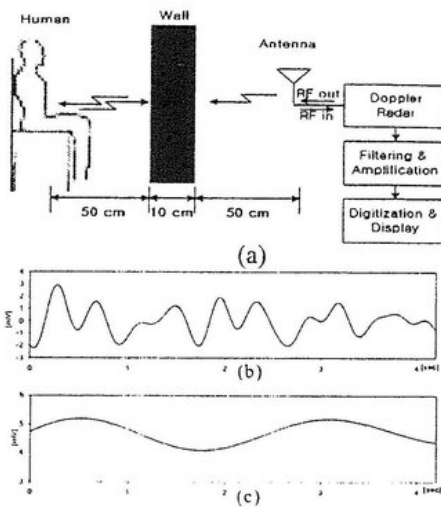


Fig 5. (a) A human measuring picture behind the wall (b) The heart rates and (c) respiration waveforms measuring a human in 10GHz behind the wall