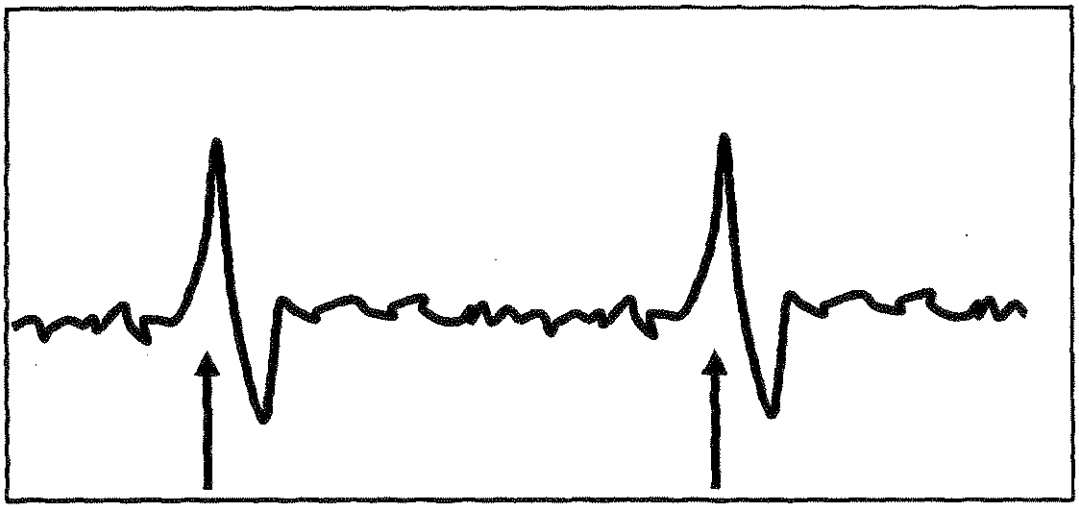


Figure 1: The amplified and filtered potential difference.

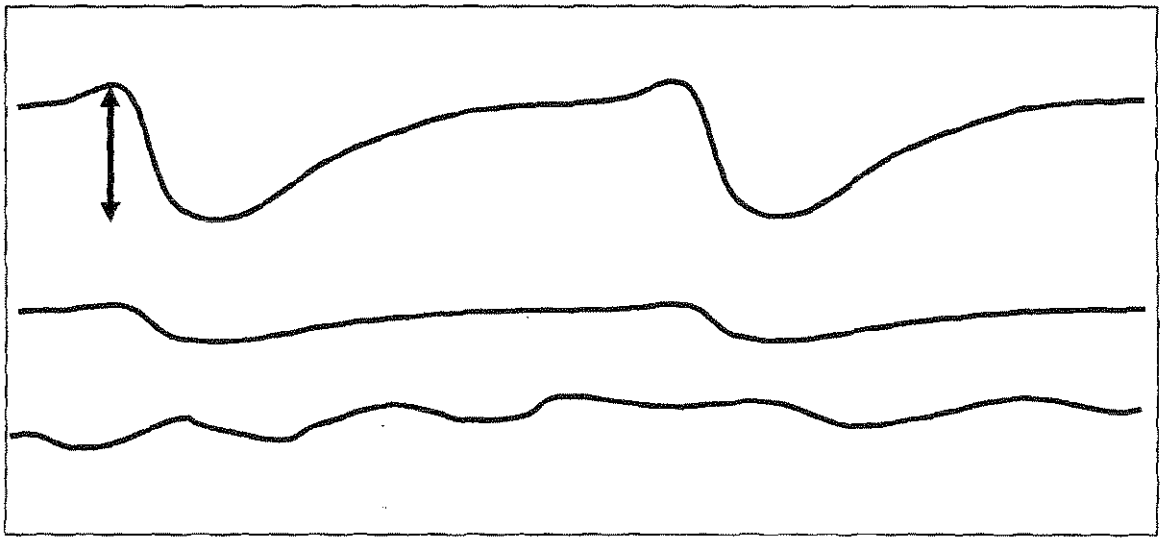


Figure 2: Schematic drawings of PPG signals

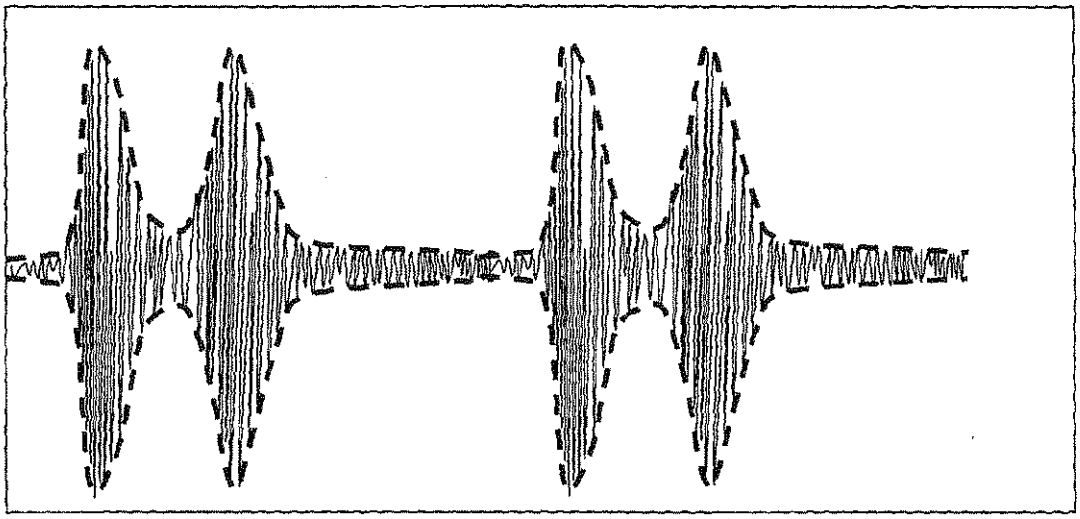


Figure 3: signal collected by the acoustic sensor

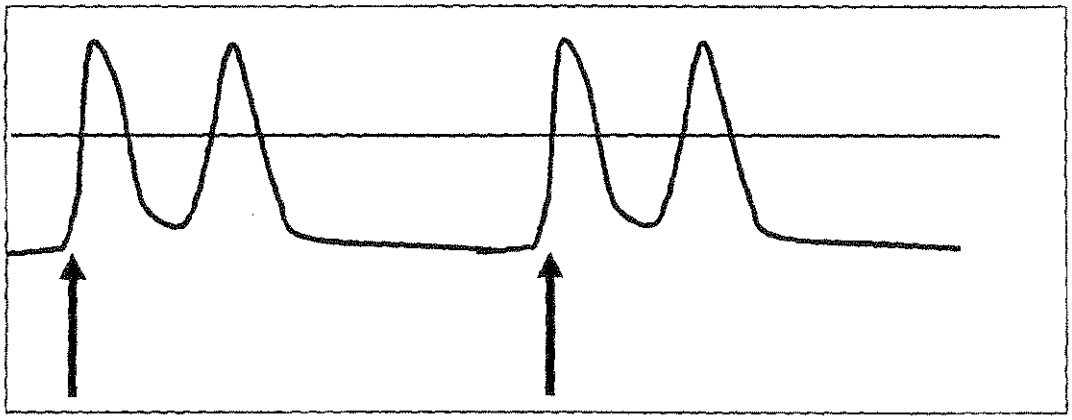
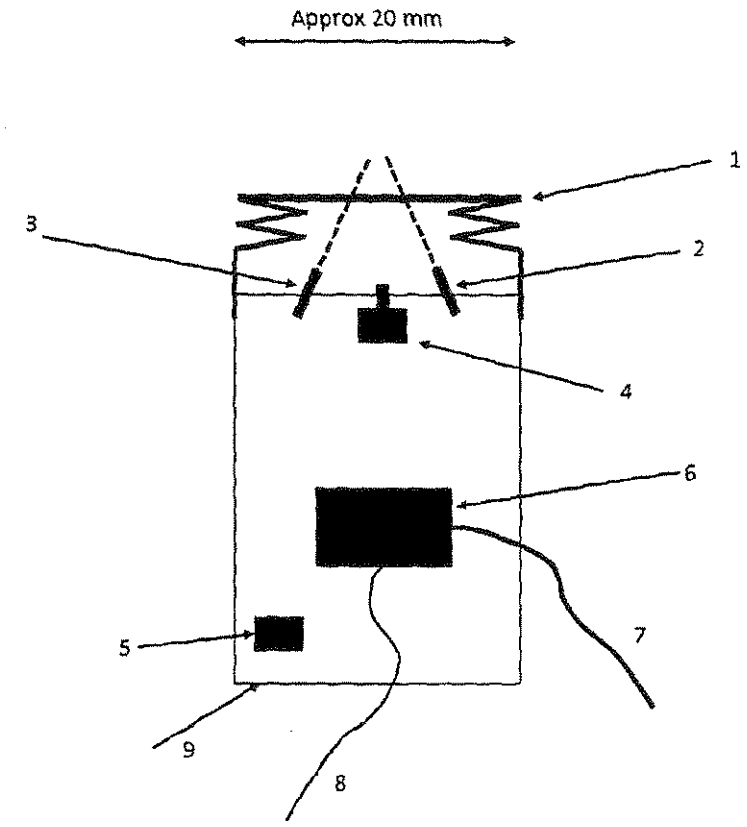
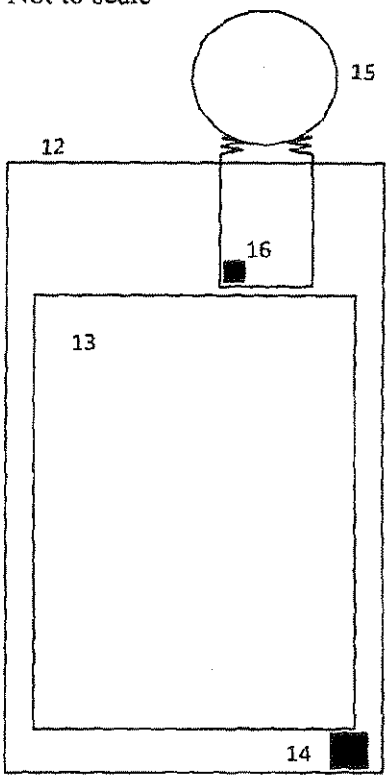


Figure 4: The acoustic envelope.



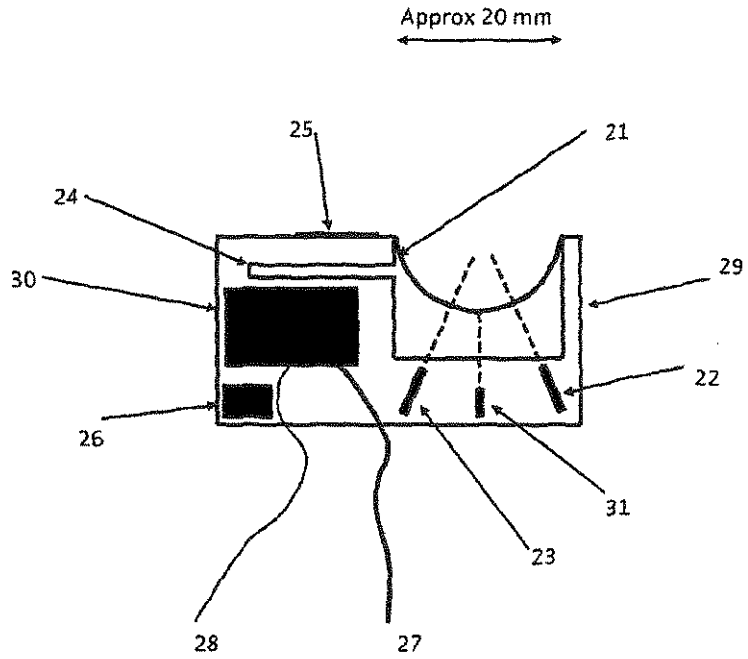
Detail of module

Not to scale



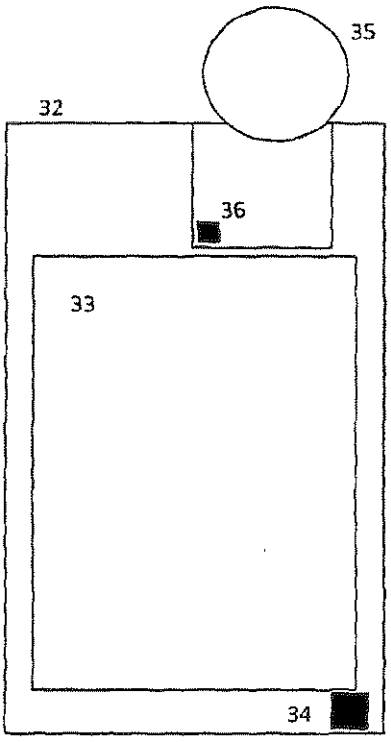
Module installed in cellphone

Figure 5



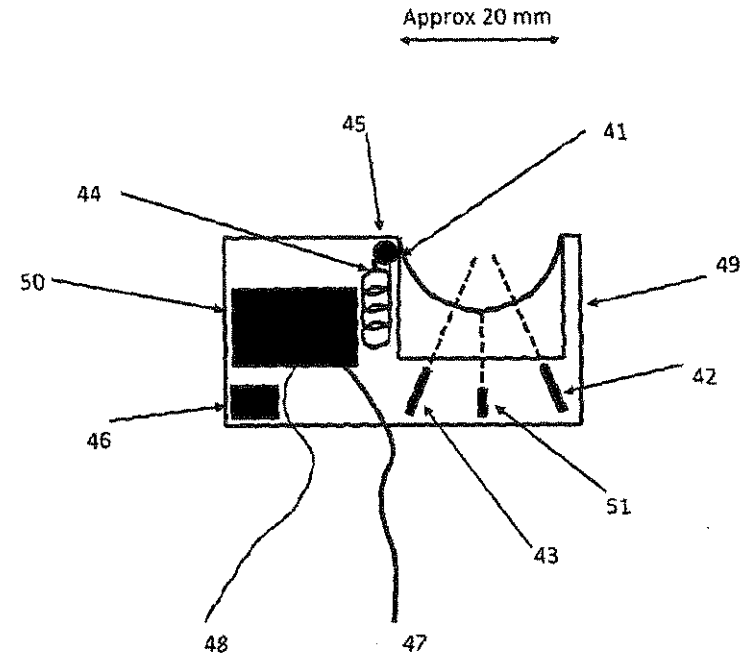
Detail of module

Not to scale



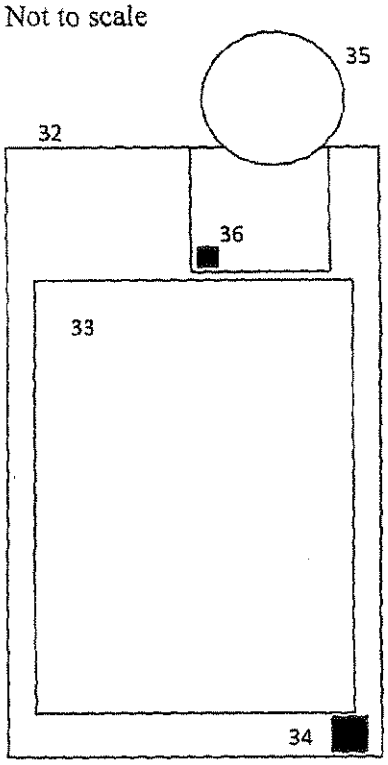
Module installed in cellphone

Figure 6



Detail of module

Not to scale



Module installed in cellphone

Figure 7

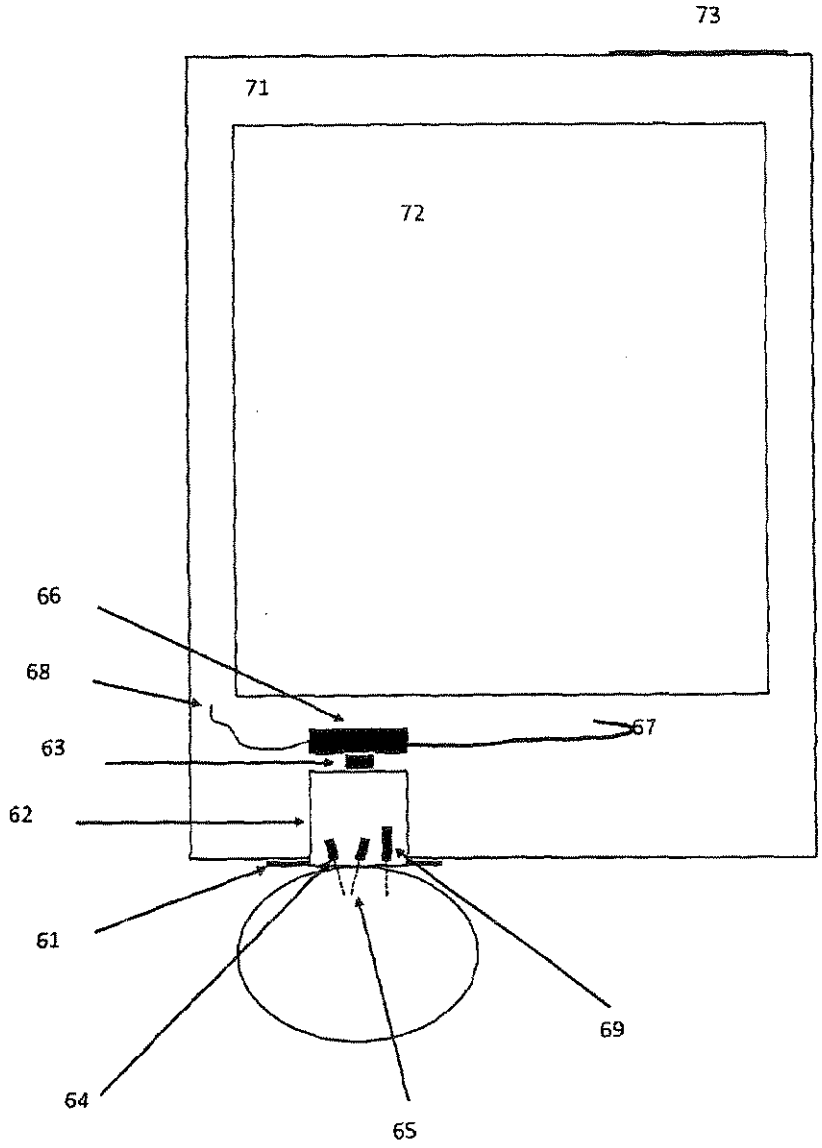


Figure 8

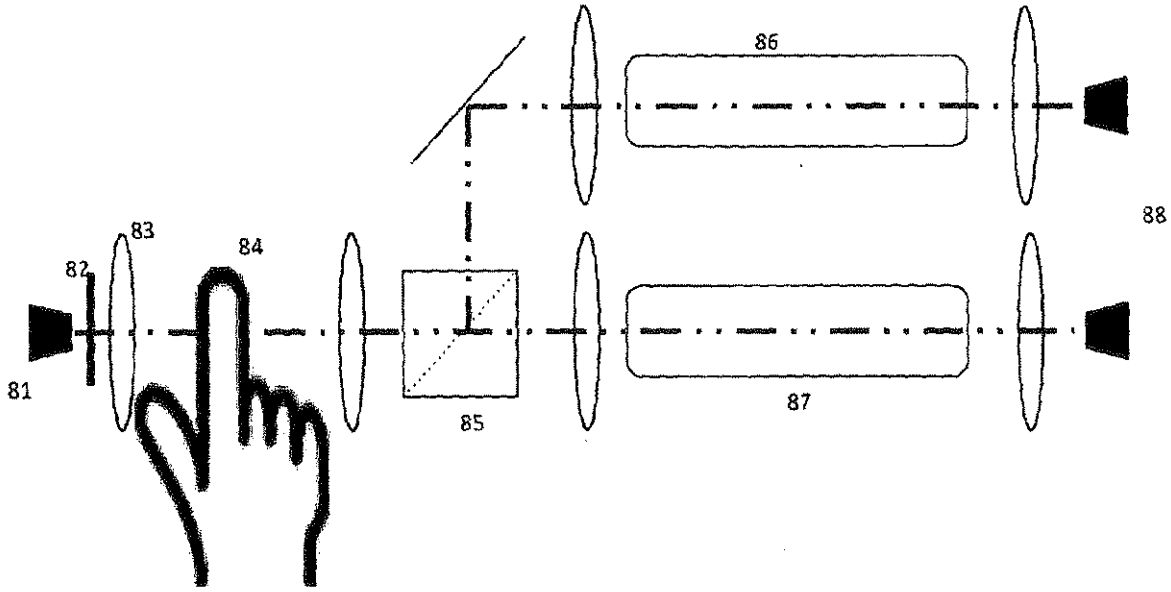


Figure 9

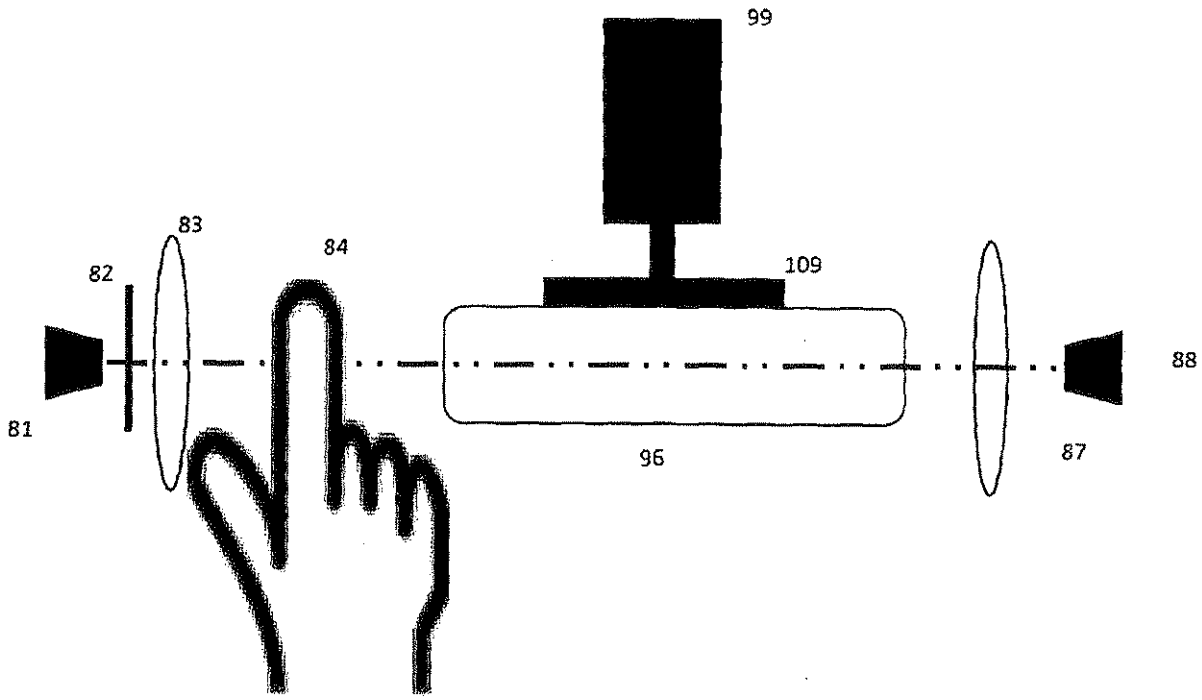


Figure 10

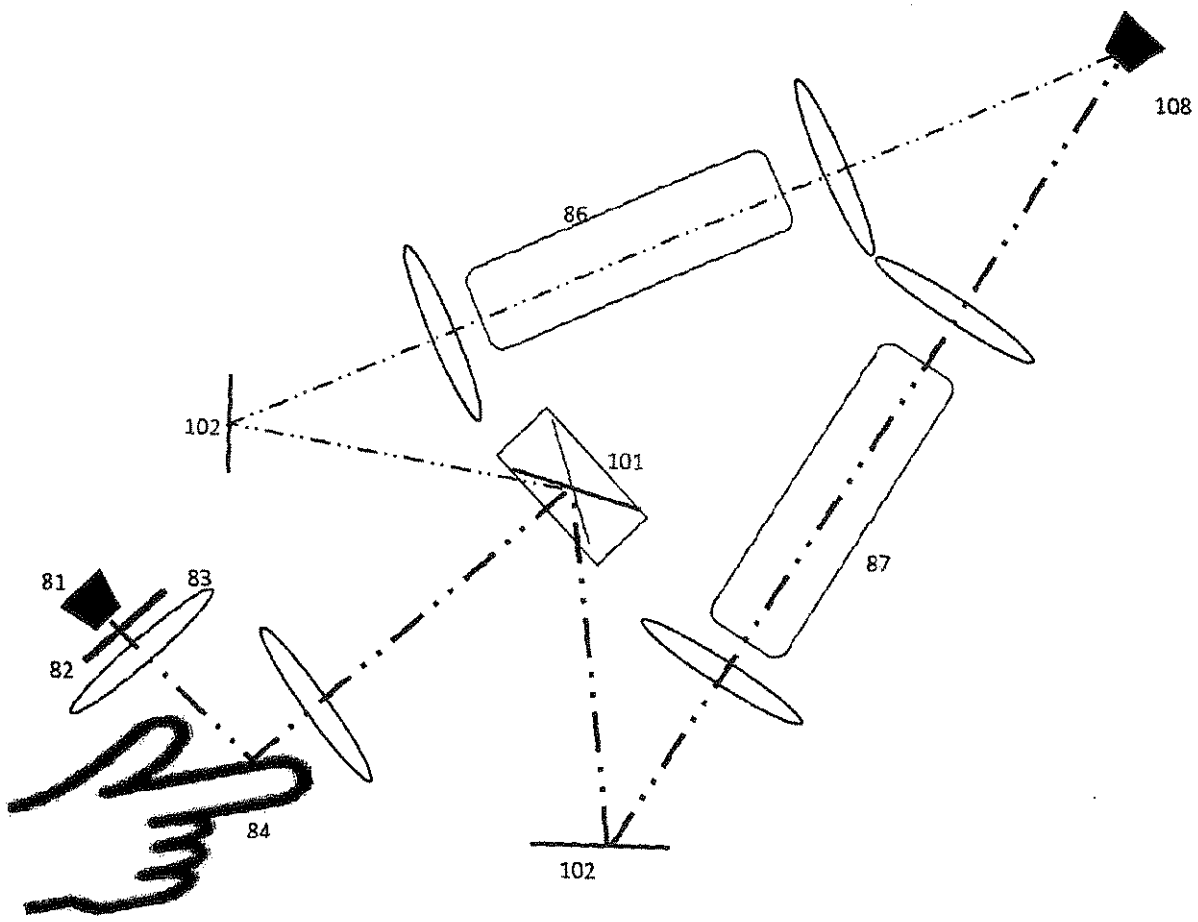


Figure 11