

CLAIMS,

1. **A device to monitor and detect obstruction in an endotracheal tube**, said device comprising:
 - comprises a **monitoring mechanism (MM)** configured to provide monitored readings relating to blockage of an endotracheal tube;
 - a **junction connector (JC)** configured to help connect an endotracheal tube to the monitoring mechanism (MM), said junction connector comprising at least a sensor selected from a group of sensors consisting of an acoustic sensor, a pressure sensor, and an ultrasonic sensors; each of said sensors configured to sense blockage in said endotracheal tube characterised in that, said acoustic sensor being configured to determine blockage level as a function of amplitude and to determine blockage location as a function of time, said pressure sensor being configured to determine blockage level as a function of pressure, said ultrasonic sensor being configured to determine blockage level as a function of frequency and to determine blockage location as a function of time, said junction connector (JC) comprising ultrasonic wave emitters;
 - a **flexible shaft (S)** configured to couple said monitoring mechanism (MM) to said junction connector (JC).
2. The device as claimed in claim 1 wherein, said junction connector (JC) comprising:
 - a first tube (52) of a first diameter and with a first opening (9), said first opening (9, C) being an opening of said junction connector (JC) towards a ventilator;

- a second tube (54) of a second diameter and with a second opening (11), said second tube (54) being co-axial with said first tube (52), said second opening (10, D) being an opening of said junction connector (JC) towards an endotracheal tube; and
 - an orthogonal stub (56) with a third opening (11) extending from said first tube (52), said third opening (11, B) being an opening of said junction connector (JC) connected to said flexible shaft (S) connected to said monitoring mechanism (MM).
3. The device as claimed in claim 1 wherein, said device comprising a mechanical ventilator connected to said second opening (10, D) of said junction connector (JC).
 4. The device as claimed in claim 1 wherein, said junction connector (JC) comprising speakers.
 5. The device as claimed in claim 1 wherein, said junction connector (JC) comprising an acoustic signal generator.
 6. The device as claimed in claim 1 wherein, said junction connector (JC) comprising a frequency generator.
 7. The device as claimed in claim 2 wherein, said monitoring mechanism (MM) comprising a blockage level detector configured to detect blockage level in terms of percentage of blockage based on sensed data from said sensor.