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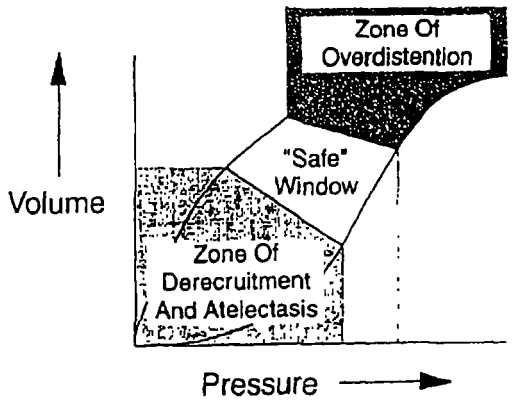
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(54) Title: METHOD AND APPARATUS FOR DETERMINING CONDITIONS OF BIOLOGICAL TISSUES



Pressure-volume curve of a moderately diseased lung illustrating two hazards of lung volume

with an optimal "safe" window between (from Froese, 1997)

(57) Abstract: The present invention relates to a method of determining characterisitcs of biological tissues in humans and animals. In particular, it relates to determining the characteristics of tissues such as the lungs and airways by introducing a sound to the tissue, and recording the sound. The invention further includes an apparatus capable of such measurement. In a first aspect of the present invention there is provided a method of determining characteristics of biological tissue *in situ*, including: introducing a sound to the tissue at first position; detecting the sound at another position spaced from the first position after it has travelled through the tissue; calculating the velocity and attenuation of sound that has travelled through the tissue from the first position to another position; and correlating the velocity and attenuation of the detected sound to characteristics of the biological tissue.

WO 01/80741 A1

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IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

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