THE MECHANISM BY TECHNICAL AND APPLIED MECHANICS, BASED BY ANY PROPRIETY OF THE MATHEMATICAL ELLIPSE

MURESAN Nicodim, RUS Alexandru, CHIRA Dan
Universitatea din Oradea
muresan@yahoo.com, alrus@uoradea.ro

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The paper presents a new type hydraulic motor, reversible in hydraulic pump, with elliptic rotary piston and the rotary chamber. The working of this type hydraulic motor or pump, is abide by the kinetic mechanism discovery by engineer ***Mureşan Nicodim*** and patented by four inventions (70799, 76973, 77503, 76950 – O.S.I.M. Bucharest) witch to allude at propriety of the mathematical ellipse $x^2/a^2+y^2/b^2-1=0$, whatever to be rotative into one curvilinear triangle, format by three equals circle arcs, vaulted to interior, with radius R, made permanent contact with the flanks of curvilinear triangle.

Coordinates of ellipse's centre:

$$x_{O_E} = \frac{a-b}{2}\cos\left(\frac{3\pi}{2} - 2\varphi\right)$$

$$y_{O_E} = \frac{a-b}{2}\sin\left(\frac{3\pi}{2} - 2\varphi\right)$$

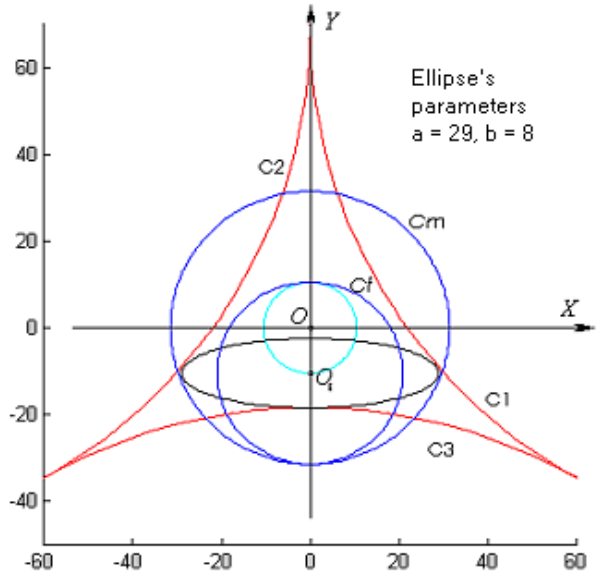

Fig 2. The propriety of the mathematical ellipse $x^2/a^2+y^2/b^2-1=0$, whatever to be rotative into one curvilinear triangle

References

1. Muresan Nicodim – Patent nr. 70799– O.S.I.M. Bucharest,
2. Muresan Nicodim – Patent nr. 76973– O.S.I.M. Bucharest,
3. Muresan Nicodim – Patent nr. 77503– O.S.I.M. Bucharest