ABOUT ONE CLASS OF EXACT DECISIONS NAVIER-STOKES EQUATIONS

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In work on the basis of bidimentional statement of a problem about current of a viscous incompressible liquid, equations Navier-Stokes, which write down in a dimensionless kind naturally are under construction. Numerical factors of similarity turn out: number Strouhal's , Euler's number, number Froude's and Reynolds's number. Considering bidimentional statement of a problem, the algorithm of a finding of the whole class of exact decisions of equations Navier-Stokes is under construction. In that specific case, exact decisions fading cells currents Benar's with Rectangular cells are under construction.

$$U = (a \sin y + b \cos y) \cdot e^{-\frac{v \cdot t}{Sh \cdot \mathrm{Re}}}$$

$$V = \lambda \cdot (m \sin x + n \cos x) \cdot e^{-\frac{v \cdot t}{Sh \cdot \mathrm{Re}}}$$

$$p(x,y) = \frac{\rho}{Eu} \cdot \left(\frac{1}{Fr^2}(X \cdot x + Y \cdot y) + \lambda \cdot ((n \sin x - m \cos x)(b \sin y - a \cos y)) \cdot e^{-\frac{2v \cdot t}{Sh \cdot \mathrm{Re}}} \right)$$