17.18

$$\alpha'\ \text{μέλος} = \frac{\sigma\upsilon\nu^3\alpha}{\eta\mu\alpha} + \frac{\varepsilon\varphi\alpha}{1+\varepsilon\varphi^2\alpha} = \sigma\upsilon\nu^2\alpha\cdot\frac{\sigma\upsilon\nu\alpha}{\eta\mu\alpha} + \eta\mu^2\alpha\cdot\frac{\dfrac{1}{\eta\mu\alpha\cdot\sigma\upsilon\nu\alpha}}{1+\varepsilon\varphi^2\alpha} =$$

$$= \sigma\upsilon\nu^2\alpha\cdot\sigma\varphi\alpha + \eta\mu^2\alpha\cdot\frac{1}{\eta\mu\alpha\cdot\sigma\upsilon\nu\alpha\left(1+\varepsilon\varphi^2\alpha\right)} =$$

$$= \sigma\upsilon\nu^2\alpha\cdot\sigma\varphi\alpha + \eta\mu^2\alpha\cdot\frac{1}{\eta\mu\alpha\cdot\sigma\upsilon\nu\alpha + \eta\mu\alpha\cdot\sigma\upsilon\nu\alpha\cdot\dfrac{\eta\mu^2\alpha}{\sigma\upsilon\nu^2\alpha}} =$$

$$= \sigma\upsilon\nu^2\alpha\cdot\sigma\varphi\alpha + \eta\mu^2\alpha\cdot\frac{1}{\eta\mu\alpha\cdot\sigma\upsilon\nu\alpha + \dfrac{\eta\mu^3\alpha}{\sigma\upsilon\nu\alpha}} =$$

$$= \sigma\upsilon\nu^2\alpha\cdot\sigma\varphi\alpha + \eta\mu^2\alpha\cdot\frac{\dfrac{1}{\eta\mu\alpha\cdot\sigma\upsilon\nu^2\alpha+\eta\mu^3\alpha}}{\sigma\upsilon\nu\alpha} =$$

$$= \sigma\upsilon\nu^2\alpha\cdot\sigma\varphi\alpha + \eta\mu^2\alpha\cdot\frac{\sigma\upsilon\nu\alpha}{\eta\mu\alpha\left(\sigma\upsilon\nu^2\alpha+\eta\mu^2\alpha\right)} =$$

$$= \sigma\upsilon\nu^2\alpha\cdot\sigma\varphi\alpha + \eta\mu^2\alpha\cdot\frac{\sigma\upsilon\nu\alpha}{\eta\mu\alpha} = \sigma\upsilon\nu^2\alpha\cdot\sigma\varphi\alpha + \eta\mu^2\alpha\cdot\sigma\varphi\alpha =$$

$$= \sigma\varphi\alpha\left(\sigma\upsilon\nu^2\alpha+\eta\mu^2\alpha\right) = \sigma\varphi\alpha =$$

$$= \beta'\ \text{μέλος}$$