Input: x_0, $v_0 = x_0$, $A_0 = 0$, L, μ_1, μ_2, $\mu = \mu_1 + \mu_2$

for $k = 0, 1, 2, \ldots$ **do**

$$A^+ = \frac{(L+\mu_2)A+1+\sqrt{(2L\mu+\mu_2^2-\mu_1^2)A^2+2(L+\mu_2)A+1}}{L-\mu_1}$$

$$B = \frac{A^+}{A^+-A} - \frac{\mu_2(A^+-A)}{2\mu(1+\mu A)} + \frac{\mu A^+}{2(1+\mu A)}$$

$$z = x + \frac{A^+-A}{A^+}(v-x)$$

$$y = \Big[\big(\frac{A}{A^+-A} + \frac{\mu A}{2(1+\mu A)}\big)x + \frac{\mu_1(A^+-A)}{2\mu(1+\mu A)}z + v - \frac{A^+-A}{2(1+\mu A)}\nabla f(z)\Big]/B$$

$$x^+ = \mathrm{Prox}_{\frac{A^+-A}{2(1+\mu A)B}h}(y)$$

$$v^+ = x^+ + \frac{A}{A^+-A}(x^+ - x)$$

end for

Output: $x^{(k)}$, $v^{(k)}$