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We say that the strong positive measure ψ , defined on $[a, b]$, belongs to the symmetric class $S^3[\tau, \beta, b]$ if $\frac{d\psi(t)}{t^\tau} = -\frac{d\psi(\beta^2/t)}{(\beta^2/t)^\tau}$, $t \in [a, b]$, where $0 < \beta < b$, $a = \beta^2/b$ and $2\tau \in \mathbb{Z}$. We let, without any loss of generality, $\beta = 1$ and consider the polynomials S_n^ψ defined by $\int_a^b t^{-s} S_n^\psi(t) d\psi(t) = 0$, $s = 0, 1, \dots, n-1$. The polynomials S_n^ψ can be called the monic Szegő polynomials on the positive interval $[a, b]$. We consider a study of the special PC-fraction

$$\beta_0 - \frac{2\beta_0}{1} - \frac{1}{\delta_1 z} - \frac{(\delta_1^2 - 1)z}{\delta_1} - \frac{1}{\delta_2 z} - \dots$$

where $\delta_n = (-1)^n \tilde{\delta}_n > 1$, $n \geq 1$. The numbers $\tilde{\delta}_n = S_n^\psi(0)$, play the role of reflection coefficients. We also look at the properties of the para-orthogonal polynomials $S_n^\psi + \tau S_n^{\psi*}$, where $\tau = \pm 1$. (Received September 23, 2005)