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We say that the strong positive measure  $\psi$ , 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  $S_n^\psi$  defined by  $\int_a^b t^{-s} S_n^\psi(t) d\psi(t) = 0$ ,  $s = 0, 1, \dots, n-1$ . The polynomials  $S_n^\psi$  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)