recently by Gómez López [8, (26)] .

THEOREM 7 : If

$$(28)\qquad g(u) = \int_0^\infty x^{\rho}\, {}_2F_1\left(\alpha, \beta, \gamma ; -\frac{1}{u} x\right) f(x)\, dx$$

and (i) $\rho > 0$, $\rho-\alpha < 0$, $\rho-\beta < -\frac{1}{2}$, $\alpha+\beta-\gamma > 0$, $\alpha+\beta-\rho > \frac{1}{2}$, $\alpha+\beta-2\rho > 1$

(ii) $f(x) \in L_2(0,\infty)$ *thus* $g(u)$ *is defined and also belongs to* $L_2(0,\infty)$,

(iii) $s^{\alpha+\beta-\gamma} F(1-s) \in L_2(\frac{1}{2}-i\infty, \frac{1}{2}+i\infty)$,

$s^{\alpha-\rho+\beta-\frac{1}{2}} F(1-s) \in L_2(\frac{1}{2}-i\infty, \frac{1}{2}+i\infty)$,

$s^{\alpha+\beta-2\rho-1} F(1-s) \in L_2(\frac{1}{2}-i\infty, \frac{1}{2}+i\infty)$

$s^{\beta-\rho-\frac{1}{2}} F(1-s) \in L_2(\frac{1}{2}-i\infty, \frac{1}{2}+i\infty)$,

(iv) $F(1-s) \in L_2(\frac{1}{2}-i\infty, \frac{1}{2}+i\infty)$,

(v) $y^{-\frac{1}{2}} f(y) \in L_2(0,\infty)$

where $f(y)$ *is of bounded variation near the point* $y=x$ *then the inversion formula for the transform (28) is*

$$(29)\quad \mathfrak{L}^{-1}\{t^{-\beta+\alpha-1}[\mathfrak{L}^{-1}\{t^{-\alpha+1}[\mathfrak{L}^{-1}\{\tau^{-\gamma}[\mathfrak{L}\{u^{\gamma-1} g(u^{-1})\}]_{t=\tau^{-1}}\}]_{x=t}\}]_{x=t^{-1}}\}$$

$$= \frac{\Gamma(\gamma)}{\Gamma(\alpha)\Gamma(\beta)}\, x^{\beta-\rho-2} f(x^{-1}).$$

Particular case : If we put $\rho=0$ this theorem reduces to the one considered recently by Gómez López [8, (22)] .

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