Вычисление производных.

Заметим, что
$dy_1y_2 = \frac{(c_{22}c_{13}-c_{12}c_{23})(c_{11}c_{23}-c_{21}c_{13})}{d} = \frac{c_{22}c_{13}c_{11}c_{23}+c_{12}c_{23}c_{21}c_{13}}{d} = c_{13}c_{23}$,
$dc_{31}y_1c_{32}y_2 = -c_{31}c_{32}dy_1y_2 = -c_{31}c_{32}c_{13}c_{23} = c_{31}c_{13}c_{32}c_{23}$,
$c_{13}(c_{31}y_1+c_{32}y_2) = \frac{c_{13}c_{31}(c_{22}c_{13}-c_{12}c_{23})+c_{13}c_{32}(c_{11}c_{23}-c_{21}c_{13})}{d} = \frac{-c_{13}c_{23}(c_{32}c_{11}-c_{31}c_{12})}{d} =$
$c_{11}c_{32}y_2y_1 + c_{12}c_{31}y_1y_2$,
$c_{11}y_1 + c_{12}y_2 = \frac{c_{11}(c_{22}c_{13}-c_{12}c_{23})+c_{12}(c_{11}c_{23}-c_{21}c_{13})}{d} = \frac{c_{11}c_{22}c_{13}-c_{12}c_{21}c_{13}}{d} = c_{13}$.

$d^{12}D = c_{12}c_{22} - c_{12}c_{22} = 0$,
$d^{13}D = c_{13}c_{22} - c_{12}c_{23} = dy_1$,
$d^{23}D = c_{11}c_{23} - c_{13}c_{21} = dy_2$,
$d^{21}D = c_{11}c_{21} - c_{11}c_{21} = 0$,
$d^{31}D = d^{32}D = 0$,

$(dy_1)^{12}D = (dy_1)^{13}D = 0$,
$(dy_1)^{23}D = -c_{23}c_{13} + c_{13}c_{23} = 2c_{13}c_{23}$,
$(dy_1)^{21}D = c_{21}c_{13} - c_{11}c_{23} = -dy_2$,
$(dy_1)^{31}D = c_{22}c_{11} - c_{12}c_{21} = d$,
$(dy_1)^{32}D = c_{22}c_{12} - c_{12}c_{22} = 0$,

$(dy_2)^{12}D = c_{12}c_{23} - c_{22}c_{13} = -dy_1$,
$(dy_2)^{13}D = -c_{13}c_{23} + c_{23}c_{13} = -2c_{13}c_{23}$,
$(dy_2)^{23}D = (dy_2)^{21}D = 0$,
$(dy_2)^{31}D = c_{11}c_{21} - c_{21}c_{11} = 0$,
$(dy_2)^{32}D = c_{11}c_{22} - c_{21}c_{12} = d$.

Предположим, что $\lambda_2 > 0$. Тогда
$v_i = d^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i}c_{12}^i(c_{33}^{\lambda_3}d-\lambda_3c_{33}^{\lambda_3-1}(c_{31}dy_1+c_{32}dy_2)+\lambda_3(\lambda_3-1)c_{33}^{\lambda_3-2}c_{31}c_{13}c_{32}c_{23})$
$w_i = d^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i}c_{12}^i(c_{33}^{\lambda_3}dy_1 - \lambda_3c_{33}^{\lambda_3-1}c_{32}c_{23}c_{13})$
$u_i = d^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i}c_{12}^i(c_{33}^{\lambda_3}dy_2 - \lambda_3c_{33}^{\lambda_3-1}c_{31}c_{13}c_{23})$
$r_i = d^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i}c_{12}^ic_{33}^{\lambda_3}c_{13}c_{23}$

$v_i^{12}D = d^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i}c_{12}^i(-\lambda_3c_{33}^{\lambda_3-1}(c_{32}dy_1+c_{32}(-y_1d))+\lambda_3(\lambda_3-1)c_{33}^{\lambda_3-2}c_{32}c_{13}c_{32}c_{23})+$
$d^{\lambda_2-1}(\lambda_1-\lambda_2-i)c_{11}^{\lambda_1-\lambda_2-(i+1)}c_{12}^{i+1}(c_{33}^{\lambda_3}d - \lambda_3c_{33}^{\lambda_3-1}(c_{31}dy_1 + c_{32}dy_2) + \lambda_3(\lambda_3 -$
$1)c_{33}^{\lambda_3-2}c_{31}c_{13}c_{32}c_{23}) = (\lambda_1-\lambda_2-i)v_{i+1}$

$v_i^{13}D = d^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i}c_{12}^i(c_{33}^{\lambda_3}y_1d - \lambda_3c_{33}^{\lambda_3-1}(-c_{33}dy_1 - 2c_{32}c_{13}c_{23}) - \lambda_3(\lambda_3 -$
$1)c_{33}^{\lambda_3-2}c_{33}c_{13}c_{32}c_{23})+(\lambda_1-\lambda_2-i)d^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i-1}c_{13}c_{12}^i(c_{33}^{\lambda_3}d-\lambda_3c_{33}^{\lambda_3-1}(c_{31}dy_1+$

$c_{32}dy_2)+\lambda_3(\lambda_3-1)c_{33}^{\lambda_3-2}c_{31}c_{13}c_{32}c_{23})+(\lambda_2-1)d^{\lambda_2-1}y_1c_{11}^{\lambda_1-\lambda_2-i}c_{12}^i(c_{33}^{\lambda_3}d-\lambda_3c_{33}^{\lambda_3-1}(c_{31}dy_1+$
$c_{32}dy_2)+\lambda_3(\lambda_3-1)c_{33}^{\lambda_3-2}c_{31}c_{13}c_{32}c_{23})=(*)$

$d^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i}c_{12}^i(c_{33}^{\lambda_3}y_1d-\lambda_3c_{33}^{\lambda_3-1}(-c_{33}dy_1-2c_{32}c_{13}c_{23})-\lambda_3(\lambda_3-1)c_{33}^{\lambda_3-2}c_{33}c_{13}c_{32}c_{23})=$
$d^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i}c_{12}^i(c_{33}^{\lambda_3}y_1d+\lambda_3c_{33}^{\lambda_3}dy_1+2\lambda_3c_{33}^{\lambda_3-1}c_{32}c_{13}c_{23}+\lambda_3(\lambda_3-1)c_{33}^{\lambda_3-1}c_{32}c_{13}c_{23})=$
$d^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i}c_{12}^i((\lambda_3+1)c_{33}^{\lambda_3}y_1d-(\lambda_3+1)\lambda_3c_{33}^{\lambda_3-1}c_{32}c_{23}c_{13})=(\lambda_3+1)w_i$

$(\lambda_2-1)d^{\lambda_2-1}y_1c_{11}^{\lambda_1-\lambda_2-i}c_{12}^i(c_{33}^{\lambda_3}d-\lambda_3c_{33}^{\lambda_3-1}(c_{31}dy_1+c_{32}dy_2)+\lambda_3(\lambda_3-1)c_{33}^{\lambda_3-2}c_{31}c_{13}c_{32}c_{23})=$
$(\lambda_2-1)w_i$

$(\lambda_1-\lambda_2-i)d^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i-1}c_{13}c_{12}^i(c_{33}^{\lambda_3}d-\lambda_3c_{33}^{\lambda_3-1}(c_{31}dy_1+c_{32}dy_2)+\lambda_3(\lambda_3-$
$1)c_{33}^{\lambda_3-2}c_{31}c_{13}c_{32}c_{23})=(\lambda_1-\lambda_2-i)d^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i-1}c_{12}^i(c_{33}^{\lambda_3}c_{13}-\lambda_3c_{33}^{\lambda_3-1}c_{13}(c_{31}y_1+$
$c_{32}y_2))=(\lambda_1-\lambda_2-i)d^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i-1}c_{12}^ic_{33}^{\lambda_3}c_{13}+(\lambda_1-\lambda_2-i)d^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i}c_{12}^i(-\lambda_3c_{33}^{\lambda_3-1}c_{32}y_2y_1)+$
$(\lambda_1-\lambda_2-i)d^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i-1}c_{12}^{i+1}(-\lambda_3c_{33}^{\lambda_3-1}c_{32}y_1y_2)=(\lambda_1-\lambda_2-i)d^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i-1}c_{12}^ic_{33}^{\lambda_3}c_{13}+$
$(\lambda_1-\lambda_2-i)w_i-(\lambda_1-\lambda_2-i)d^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i}c_{12}^ic_{33}^{\lambda_3}y_1+(\lambda_1-\lambda_2-i)u_{i+1}-(\lambda_1-$
$\lambda_2-i)d^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i-1}c_{12}^{i+1}c_{33}^{\lambda_3}y_2=(\lambda_1-\lambda_2-i)w_i+(\lambda_1-\lambda_2-i)u_{i+1}+(\lambda_1-\lambda_2-$
$i)d^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i-1}c_{12}^ic_{33}^{\lambda_3}(c_{13}-c_{11}y_1-c_{12}y_2)=(\lambda_1-\lambda_2-i)w_i+(\lambda_1-\lambda_2-i)u_{i+1}$

$(*)=(\lambda_3+1)w_i+(\lambda_2-1)w_i+(\lambda_1-\lambda_2-i)w_i+(\lambda_1-\lambda_2-i)u_{i+1}=$
$(\lambda_1+\lambda_3-i)w_i+(\lambda_1-\lambda_2-i)u_{i+1}$

$v_i^{23D}=d^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i}c_{12}^i(c_{33}^{\lambda_3}y_2d-\lambda_3c_{33}^{\lambda_3-1}(2c_{31}c_{13}c_{23}-c_{33}dy_2)-\lambda_3(\lambda_3-$
$1)c_{33}^{\lambda_3-2}c_{31}c_{13}c_{33}c_{23})+id^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i}c_{12}^{i-1}c_{13}(c_{33}^{\lambda_3}d-\lambda_3c_{33}^{\lambda_3-1}(c_{31}dy_1+c_{32}dy_2)+$
$\lambda_3(\lambda_3-1)c_{33}^{\lambda_3-2}c_{31}c_{13}c_{32}c_{23})+(\lambda_2-1)d^{\lambda_2-1}y_1c_{11}^{\lambda_1-\lambda_2-i}c_{12}^i(c_{33}^{\lambda_3}d-\lambda_3c_{33}^{\lambda_3-1}(c_{31}dy_1+$
$c_{32}dy_2)+\lambda_3(\lambda_3-1)c_{33}^{\lambda_3-2}c_{31}c_{13}c_{32}c_{23})=(**)$

$d^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i}c_{12}^i(c_{33}^{\lambda_3}y_2d-\lambda_3c_{33}^{\lambda_3-1}(2c_{31}c_{13}c_{23}-c_{33}dy_2)-\lambda_3(\lambda_3-1)c_{33}^{\lambda_3-2}c_{31}c_{13}c_{33}c_{23})=$
$d^{\lambda_2}c_{11}^{\lambda_1-\lambda_2-i}c_{12}^i(c_{33}^{\lambda_3}y_2+\lambda_3c_{33}^{\lambda_3}y_2-2\lambda_3c_{33}^{\lambda_3-1}c_{31}y_1y_2-\lambda_3(\lambda_3-1)c_{33}^{\lambda_3-1}c_{31}y_1y_2)=$
$d^{\lambda_2}c_{11}^{\lambda_1-\lambda_2-i}c_{12}^i((\lambda_3+1)c_{33}^{\lambda_3}y_2-(\lambda_3+1)\lambda_3c_{33}^{\lambda_3-1}c_{31}y_1y_2)=(\lambda_3+1)u_i$

$(\lambda_2-1)d^{\lambda_2-1}y_2c_{11}^{\lambda_1-\lambda_2-i}c_{12}^i(c_{33}^{\lambda_3}d-\lambda_3c_{33}^{\lambda_3-1}(c_{31}dy_1+c_{32}dy_2)+\lambda_3(\lambda_3-1)c_{33}^{\lambda_3-2}c_{31}c_{13}c_{32}c_{23})=$
$(\lambda_2-1)u_i$

$id^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i}c_{12}^{i-1}c_{13}(c_{33}^{\lambda_3}d-\lambda_3c_{33}^{\lambda_3-1}(c_{31}dy_1+c_{32}dy_2)+\lambda_3(\lambda_3-1)c_{33}^{\lambda_3-2}c_{31}c_{13}c_{32}c_{23})=$
$id^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i}c_{12}^{i-1}(c_{33}^{\lambda_3}c_{13}-\lambda_3c_{33}^{\lambda_3-1}c_{13}(c_{31}y_1+c_{32}y_2))=id^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i}c_{12}^{i-1}c_{33}^{\lambda_3}c_{13}+$
$id^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i+1}c_{12}^{i-1}(-\lambda_3c_{33}^{\lambda_3-1}c_{32}y_2y_1)+id^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i}c_{12}^i(-\lambda_3c_{33}^{\lambda_3-1}c_{32}y_1y_2)=$
$id^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i}c_{12}^{i-1}c_{33}^{\lambda_3}c_{13}+iw_{i-1}-id^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i+1}c_{12}^{i-1}c_{33}^{\lambda_3}y_1+iu_i-id^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i}c_{12}^ic_{33}^{\lambda_3}y_2=$
$iw_{i-1}+iu_i+id^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i}c_{12}^{i-1}c_{33}^{\lambda_3}(c_{13}-c_{11}y_1-c_{12}y_2)=iw_{i-1}+iu_i$

$(**) = (\lambda_3+1)u_i + (\lambda_2-1)u_i + iw_{i-1} + iu_i = iw_{i-1} + (\lambda_1+\lambda_3+i)u_i$

$v_i^{21D} = d^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i}c_{12}^i(-\lambda_3 c_{33}^{\lambda_3-1}(c_{31}(-dy_2)+c_{31}dy_2)) + iv_{i-1} = iv_{i-1}$

$v_i^{31D} = d^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i}c_{12}^i(\lambda_3 c_{33}^{\lambda_3-1}c_{31}d - \lambda_3(\lambda_3-1)c_{33}^{\lambda_3-2}c_{31}(c_{31}dy_1+c_{32}dy_2) - \lambda_3 c_{33}^{\lambda_3-1}c_{31}d + \lambda_3(\lambda_3-1)(\lambda_3-2)c_{33}^{\lambda_3-3}c_{31}c_{31}c_{13}c_{32}c_{23} + \lambda_3(\lambda_3-1)c_{33}^{\lambda_3-2}(c_{31}c_{11}c_{32}c_{23} + c_{31}c_{13}c_{32}c_{21})) = d^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i}c_{12}^i(-\lambda_3(\lambda_3-1)c_{33}^{\lambda_3-2}c_{31}c_{32}dy_2 + \lambda_3(\lambda_3-1)c_{33}^{\lambda_3-2}c_{31}c_{32}(c_{11}c_{23} - c_{13}c_{21})) = 0$

$v_i^{32D} = d^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i}c_{12}^i(\lambda_3 c_{33}^{\lambda_3-1}c_{32}d - \lambda_3(\lambda_3-1)c_{33}^{\lambda_3-2}c_{32}(c_{31}dy_1+c_{32}dy_2) - \lambda_3 c_{33}^{\lambda_3-1}c_{32}d + \lambda_3(\lambda_3-1)(\lambda_3-2)c_{33}^{\lambda_3-3}c_{32}c_{31}c_{13}c_{32}c_{23} + \lambda_3(\lambda_3-1)c_{33}^{\lambda_3-2}(c_{31}c_{12}c_{32}c_{23} + c_{31}c_{13}c_{32}c_{22})) = d^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i}c_{12}^i(-\lambda_3(\lambda_3-1)c_{33}^{\lambda_3-2}c_{32}c_{31}dy_1 + \lambda_3(\lambda_3-1)c_{33}^{\lambda_3-2}c_{32}c_{31}(c_{13}c_{22} - c_{12}c_{23})) = 0$

$w_i^{12D} = (\lambda_1-\lambda_2-i)d^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i-1}c_{12}^{i+1}(c_{33}^{\lambda_3}dy_1 - \lambda_3 c_{33}^{\lambda_3-1}c_{32}c_{23}c_{13}) = (\lambda_1-\lambda_2-i)w_{i+1}$

$w_i^{13D} = -(\lambda_1-\lambda_2-i)d^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i-1}c_{13}c_{12}^i(c_{33}^{\lambda_3}dy_1 - \lambda_3 c_{33}^{\lambda_3-1}c_{32}c_{23}c_{13}) - (\lambda_2-1)d^{\lambda_2-1}y_1c_{11}^{\lambda_1-\lambda_2-i}c_{12}^i(c_{33}^{\lambda_3}dy_1 - \lambda_3 c_{33}^{\lambda_3-1}c_{32}c_{23}c_{13}) = -(\lambda_1-\lambda_2-i)d^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i-1}c_{12}^i c_{33}^{\lambda_3}c_{13}dy_1 = -(\lambda_1-\lambda_2-i)d^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i-1}c_{12}^i c_{33}^{\lambda_3}(-c_{13}c_{12}c_{23}) = (\lambda_1-\lambda_2-i)d^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i-1}c_{12}^{i+1}c_{33}^{\lambda_3}c_{13}c_{23} = (\lambda_1-\lambda_2-i)r_{i+1}$

$w_i^{23D} = d^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i}c_{12}^i(c_{33}^{\lambda_3}2c_{13}c_{23} - \lambda_3 c_{33}^{\lambda_3-1}c_{33}c_{23}c_{13}) - id^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i}c_{12}^{i-1}c_{13}(c_{33}^{\lambda_3}dy_1 - \lambda_3 c_{33}^{\lambda_3-1}c_{32}c_{23}c_{13}) - (\lambda_2-1)d^{\lambda_2-1}y_2c_{11}^{\lambda_1-\lambda_2-i}c_{12}^i(c_{33}^{\lambda_3}dy_1 - \lambda_3 c_{33}^{\lambda_3-1}c_{32}c_{23}c_{13}) = (\lambda_3+2)d^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i}c_{12}^i c_{33}^{\lambda_3}c_{13}c_{23} - id^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i}c_{12}^{i-1}c_{33}^{\lambda_3}c_{13}dy_1 - (\lambda_2-1)d^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i}c_{12}^i c_{33}^{\lambda_3}dy_1y_2 = (\lambda_3+2)r_i + ir_i + (\lambda_2-1)r_i = (\lambda_2+\lambda_3+i+1)r_i$

$w_i^{21D} = d^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i}c_{12}^i(c_{33}^{\lambda_3}(-dy_2) - \lambda_3 c_{33}^{\lambda_3-1}c_{31}c_{23}c_{13}) - id^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i+1}c_{12}^{i-1}(c_{33}^{\lambda_3}dy_1 - \lambda_3 c_{33}^{\lambda_3-1}c_{32}c_{23}c_{13}) = -u_i - iw_{i-1}$

$w_i^{31D} = d^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i}c_{12}^i(c_{33}^{\lambda_3}d - \lambda_3 c_{33}^{\lambda_3-1}c_{31}dy_1 - \lambda_3 c_{33}^{\lambda_3-1}c_{32}(c_{23}c_{11} - c_{21}c_{13}) + \lambda_3(\lambda_3-1)c_{33}^{\lambda_3-2}c_{31}c_{32}c_{23}c - 13) = d^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i}c_{12}^i(c_{33}^{\lambda_3}d - \lambda_3 c_{33}^{\lambda_3-1}(c_{31}dy_1 + c_{32}dy_2) + \lambda_3(\lambda_3-1)c_{33}^{\lambda_3-2}c_{31}c_{13}c_{32}c_{23}) = v_i$

$w_i^{32D} = d^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i}c_{12}^i(-\lambda_3 c_{33}^{\lambda_3-1}c_{32}dy_1 - \lambda_3 c_{33}^{\lambda_3-1}c_{32}(c_{23}c_{12} - c_{22}c_{13}) + \lambda_3(\lambda_3-1)c_{33}^{\lambda_3-2}c_{32}c_{32}c_{23}c_{13}) = d^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i}c_{12}^i(-\lambda_3 c_{33}^{\lambda_3-1}c_{32}dy_1 - \lambda_3 c_{33}^{\lambda_3-1}c_{32}(-dy_1)) = 0$

$u_i^{12D} = d^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i}c_{12}^i(c_{33}^{\lambda_3}(-dy_1)-\lambda_3 c_{33}^{\lambda_3-1}c_{32}c_{13}c_{23})+(\lambda_1-\lambda_2-i)u_{i+1} = -w_i + u_{i+1}$

$u_i^{13D} = d^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i}c_{12}^i(c_{33}^{\lambda_3}(-2c_{13}c_{23}) - \lambda_3 c_{33}^{\lambda_3-1}c_{33}c_{13}c_{23}) - (\lambda_1 - \lambda_2 - i)d^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i-1}c_{13}c_{12}^i(c_{33}^{\lambda_3}dy_2-\lambda_3 c_{33}^{\lambda_3-1}c_{31}c_{13}c_{23})-(\lambda_2-1)d^{\lambda_2-1}y_1c_{11}^{\lambda_1-\lambda_2-i}c_{12}^i(c_{33}^{\lambda_3}dy_2-\lambda_3 c_{33}^{\lambda_3-1}c_{31}c_{13}c_{23}) = d^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i}c_{12}^i(-2c_{33}^{\lambda_3}c_{13}c_{23} - \lambda_3 c_{33}^{\lambda_3}c_{13}c_{23}) - (\lambda_1 - \lambda_2 - i)d^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i-1}c_{12}^i c_{33}^{\lambda_3}c_{13}dy_2 - (\lambda_2 - 1)d^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i}c_{12}^i c_{33}^{\lambda_3}dy_1y_2 = -(\lambda_3 + 2)r_i - (\lambda_1 - \lambda_2 - i)r_i - (\lambda_2 - 1)r_i = (i - \lambda_1 - \lambda_3 - 1)r_i$

$u_i^{23D} = -id^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i}c_{12}^{i-1}c_{13}(c_{33}^{\lambda_3}dy_2-\lambda_3 c_{33}^{\lambda_3-1}c_{31}c_{13}c_{23})-(\lambda_2-1)d^{\lambda_2-1}y_2c_{11}^{\lambda_1-\lambda_2-i}c_{12}^i(c_{33}^{\lambda_3}dy_2-\lambda_3 c_{33}^{\lambda_3-1}c_{31}c_{13}c_{23}) = -id^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i}c_{12}^{i-1}c_{33}^{\lambda_3}c_{13}dy_2 = -ir_{i-1}$

$u_i^{21D} = id^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i+1}c_{12}^{i-1}(c_{33}^{\lambda_3}dy_2 - \lambda_3 c_{33}^{\lambda_3-1}c_{31}c_{13}c_{23}) = iu_{i-1}$

$u_i^{31D} = d^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i}c_{12}^i(-\lambda_3 c_{33}^{\lambda_3-1}c_{31}dy_2 - \lambda_3 c_{33}^{\lambda_3-1}c_{31}(c_{13}c_{21} - c_{11}c_{23}) + \lambda_3(\lambda_3-1)c_{33}^{\lambda_3-2}c_{31}c_{31}c_{13}c_{23}) = d^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i}c_{12}^i(-\lambda_3 c_{33}^{\lambda_3-1}c_{31}dy_2-\lambda_3 c_{33}^{\lambda_3-1}c_{31}(-dy_2)) = 0$

$u_i^{32D} = d^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i}c_{12}^i(c_{33}^{\lambda_3}d-\lambda_3 c_{33}^{\lambda_3-1}c_{32}dy_2-\lambda_3 c_{33}^{\lambda_3-1}c_{31}(c_{13}c_{22}-c_{12}c_{23})+\lambda_3(\lambda_3-1)c_{33}^{\lambda_3-2}c_{32}c_{31}c_{13}c_{23}) = d^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i}c_{12}^i(c_{33}^{\lambda_3}d-\lambda_3 c_{33}^{\lambda_3-1}(c_{31}dy_1+c_{32}dy_2)+\lambda_3(\lambda_3-1)c_{33}^{\lambda_3-2}c_{31}c_{13}c_{32}c_{23}) = v_i$

$r_i^{12D} = (\lambda_1 - \lambda_2 - i)d^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i-1}c_{12}^{i+1}c_{33}^{\lambda_3}c_{13}c_{23} = (\lambda_1 - \lambda_2 - 1)r_{i+1}$

$r_i^{13D} = (\lambda_1-\lambda_2-i)d^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i-1}c_{13}c_{12}^i c_{33}^{\lambda_3}c_{13}c_{23}+(\lambda_2-1)d^{\lambda_2-1}y_1c_{11}^{\lambda_1-\lambda_2-i-1}c_{13}c_{12}^i c_{33}^{\lambda_3}c_{13}c_{23} = 0$

$r_i^{23D} = id^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i}c_{13}c_{12}^{i-1}c_{13}c_{33}^{\lambda_3}c_{13}c_{23}+(\lambda_2-1)d^{\lambda_2-1}y_2c_{11}^{\lambda_1-\lambda_2-i-1}c_{13}c_{12}^i c_{33}^{\lambda_3}c_{13}c_{23} = 0$

$r_i^{21D} = id^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i+1}c_{12}^{i-1}c_{33}^{\lambda_3}c_{13}c_{23} = ir_{i-1}$

$r_i^{31D} = d^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i}c_{12}^i(c_{33}^{\lambda_3}(c_{13}c_{21} - c_{11}c_{23}) + \lambda_3 c_{33}^{\lambda_3-1}c_{31}c_{13}c_{23}) = -u_i$

$r_i^{32D} = d^{\lambda_2-1}c_{11}^{\lambda_1-\lambda_2-i}c_{12}^i(c_{33}^{\lambda_3}(c_{13}c_{22} - c_{12}c_{23}) + \lambda_3 c_{33}^{\lambda_3-1}c_{32}c_{13}c_{23}) = w_i$