

Anhang 3. Ableitungen des Kolmogorov-Netzwerkes

A3.1. Definition des Netzwerkes

Die verallgemeinerte Form des Kolmogorov-Netzwerkes ist gegeben durch

$$h(\mathbf{x}_1, \dots, \mathbf{x}_n) = \psi_0 \left((\mathbf{v}_j (\psi_j ((\mathbf{u}_{j,i}(\mathbf{x}_i))_{1 \leq i \leq n}))_{1 \leq j \leq n'}) \right)$$

Wir wählen $n=2$ minimal und $n'=2n+1=5$ entsprechend des ursprünglichen Kolmogorov-Beispiels.

Wir wählen die Bezeichnungen u, v wie oben und p statt ψ . Im Ursprung sind alle Funktionen auf 0 normiert.

$$\begin{aligned} p_1[0, 0] &= 0; p_2[0, 0] = 0; p_3[0, 0] = 0; p_4[0, 0] = 0; p_5[0, 0] = 0; \\ v_1[0] &= 0; v_2[0] = 0; v_3[0] = 0; v_4[0] = 0; v_5[0] = 0; \\ u_{11}[0] &= 0; u_{21}[0] = 0; u_{31}[0] = 0; u_{41}[0] = 0; u_{51}[0] = 0; \\ u_{12}[0] &= 0; u_{22}[0] = 0; u_{32}[0] = 0; u_{42}[0] = 0; u_{52}[0] = 0; \\ h[x1_, x2_] &:= p_0 [v_1 [p_1 [u_{11} [x1], u_{12} [x2]]], v_2 [p_2 [u_{21} [x1], u_{22} [x2]]], \\ &v_3 [p_3 [u_{31} [x1], u_{32} [x2]]], v_4 [p_4 [u_{41} [x1], u_{42} [x2]]], v_5 [p_5 [u_{51} [x1], u_{52} [x2]]]]; \end{aligned}$$

Nun können wir verschiedene Ableitungen von h im Ursprung $[0,0]$ berechnen. Zur besseren Lesbarkeit der Ergebnisse entfernen wir danach jeweils alle Argument-Angaben der Form $[0, \dots, 0]$, die lediglich den Ursprung als Entwicklungspunkt aller Ableitungen widerspiegeln. Außerdem bestimmen wir jeweils die Zahl der auftretenden Summanden.

A3.3. Erste Ableitung

```
d1h[x1_, x2_] = D[h[x1, x2], x1];
d1h00 = StringReplace[ToString[Expand[d1h[0, 0]], FormatType -> InputForm],
  {"[0, 0, 0, 0, 0]" -> "", "[0, 0]" -> "", "[0]" -> ""}];
Print[1 + Count[Characters[d1h00], "+"], " Terme:"];
ToExpression[d1h00]
```

5 Terme:

$$u'_{51} v'_5 p_5^{(1,0)} p_0^{(0,0,0,0,1)} + u'_{41} v'_4 p_4^{(1,0)} p_0^{(0,0,0,1,0)} + u'_{31} v'_3 p_3^{(1,0)} p_0^{(0,0,1,0,0)} + u'_{21} v'_2 p_2^{(1,0)} p_0^{(0,1,0,0,0)} + u'_{11} v'_1 p_1^{(1,0)} p_0^{(1,0,0,0,0)}$$

A3.4. Zweite Ableitung

```
d2h[x1_, x2_] = D[h[x1, x2], x1, x2];
d2h00 = StringReplace[ToString[Expand[d2h[0, 0]], FormatType -> InputForm],
  {"[0, 0, 0, 0, 0]" -> "", "[0, 0]" -> "", "[0]" -> ""}];
Print[1 + Count[Characters[d2h00], "+"], " Terme:"];
ToExpression[d2h00]
```

35 Terme:

$$\begin{aligned} &u'_{11} u'_{12} p_1^{(0,1)} p_1^{(1,0)} p_0^{(2,0,0,0,0)} (v'_1)^2 + u'_{11} u'_{12} p_1^{(1,1)} p_0^{(1,0,0,0,0)} v'_1 + u'_{11} u'_{52} v'_5 p_5^{(0,1)} p_1^{(1,0)} p_0^{(1,0,0,0,1)} v'_1 + u'_{12} u'_{51} v'_5 p_1^{(0,1)} p_5^{(1,0)} p_0^{(1,0,0,0,1)} v'_1 + \\ &u'_{11} u'_{42} v'_4 p_4^{(0,1)} p_1^{(1,0)} p_0^{(1,0,0,1,0)} v'_1 + u'_{12} u'_{41} v'_4 p_1^{(0,1)} p_4^{(1,0)} p_0^{(1,0,0,1,0)} v'_1 + u'_{11} u'_{32} v'_3 p_3^{(0,1)} p_1^{(1,0)} p_0^{(1,0,1,0,0)} v'_1 + \\ &u'_{12} u'_{31} v'_3 p_1^{(0,1)} p_3^{(1,0)} p_0^{(1,0,1,0,0)} v'_1 + u'_{11} u'_{22} v'_2 p_2^{(0,1)} p_1^{(1,0)} p_0^{(1,1,0,0,0)} v'_1 + u'_{12} u'_{21} v'_2 p_1^{(0,1)} p_2^{(1,0)} p_0^{(1,1,0,0,0)} v'_1 + \\ &u'_{51} u'_{52} v'_5 p_5^{(0,1)} p_5^{(1,0)} p_0^{(0,0,0,0,1)} + u'_{51} u'_{52} v'_5 p_5^{(1,1)} p_0^{(0,0,0,0,1)} + u'_{51} u'_{52} (v'_5)^2 p_5^{(0,1)} p_5^{(1,0)} p_0^{(0,0,0,0,2)} + u'_{41} u'_{42} v'_4 p_4^{(0,1)} p_4^{(1,0)} p_0^{(0,0,0,1,0)} + \\ &u'_{41} u'_{42} v'_4 p_4^{(1,1)} p_0^{(0,0,0,1,0)} + u'_{41} u'_{52} v'_5 p_5^{(0,1)} p_4^{(1,0)} p_0^{(0,0,0,1,1)} + u'_{42} u'_{51} v'_5 p_4^{(0,1)} p_5^{(1,0)} p_0^{(0,0,0,1,1)} + u'_{41} u'_{42} (v'_4)^2 p_4^{(0,1)} p_4^{(1,0)} p_0^{(0,0,0,2,0)} + \\ &u'_{31} u'_{32} v'_3 p_3^{(0,1)} p_3^{(1,0)} p_0^{(0,0,1,0,0)} + u'_{31} u'_{32} v'_3 p_3^{(1,1)} p_0^{(0,0,1,0,0)} + u'_{31} u'_{52} v'_5 p_5^{(0,1)} p_3^{(1,0)} p_0^{(0,0,1,0,1)} + u'_{32} u'_{51} v'_5 p_3^{(0,1)} p_5^{(1,0)} p_0^{(0,0,1,0,1)} + \\ &u'_{31} u'_{42} v'_4 p_4^{(0,1)} p_3^{(1,0)} p_0^{(0,0,1,1,0)} + u'_{32} u'_{41} v'_4 p_3^{(0,1)} p_4^{(1,0)} p_0^{(0,0,1,1,0)} + u'_{31} u'_{32} (v'_3)^2 p_3^{(0,1)} p_3^{(1,0)} p_0^{(0,0,2,0,0)} + \\ &u'_{21} u'_{22} v'_2 p_2^{(0,1)} p_2^{(1,0)} p_0^{(0,1,0,0,0)} + u'_{21} u'_{22} v'_2 p_2^{(1,1)} p_0^{(0,1,0,0,0)} + u'_{21} u'_{52} v'_5 p_5^{(0,1)} p_2^{(1,0)} p_0^{(0,1,0,0,1)} + u'_{22} u'_{51} v'_5 p_2^{(0,1)} p_5^{(1,0)} p_0^{(0,1,0,0,1)} + \\ &u'_{21} u'_{42} v'_4 p_4^{(0,1)} p_2^{(1,0)} p_0^{(0,1,0,1,0)} + u'_{22} u'_{41} v'_4 p_2^{(0,1)} p_4^{(1,0)} p_0^{(0,1,0,1,0)} + u'_{21} u'_{32} v'_3 p_3^{(0,1)} p_2^{(1,0)} p_0^{(0,1,1,0,0)} + \\ &u'_{22} u'_{31} v'_3 p_2^{(0,1)} p_3^{(1,0)} p_0^{(0,1,1,0,0)} + u'_{21} u'_{22} (v'_2)^2 p_2^{(0,1)} p_2^{(1,0)} p_0^{(0,2,0,0,0)} + u'_{11} u'_{12} v'_1 p_1^{(0,1)} p_1^{(1,0)} p_0^{(1,0,0,0,0)} \end{aligned}$$

A3.5. Dritte Ableitung

```
d3h[x1_, x2_] = D[h[x1, x2], x1, x1, x2];
d3h00 = StringReplace[ToString[Expand[d3h[0, 0]], FormatType -> InputForm],
  {"[0, 0, 0, 0, 0]" -> "", "[0, 0]" -> "", "[0]" -> ""}];
Print[1 + Count[Characters[d3h00], "+"], " Terme:"];
ToExpression[d3h00]
```

225 Terme:

$$\begin{aligned}
& (u'_{11})^2 u'_{12} p_1^{(0,1)} (p_1^{(1,0)})^2 p_0^{(3,0,0,0)} (v'_1)^3 + u'_{12} u''_{11} p_1^{(0,1)} p_1^{(1,0)} p_0^{(2,0,0,0)} (v'_1)^2 + 2 (u'_{11})^2 u'_{12} p_1^{(1,0)} p_1^{(1,1)} p_0^{(2,0,0,0)} (v'_1)^2 + \\
& (u'_{11})^2 u'_{12} p_1^{(0,1)} p_1^{(2,0)} p_0^{(2,0,0,0)} (v'_1)^2 + (u'_{11})^2 u'_{52} v'_5 p_5^{(0,1)} (p_1^{(1,0)})^2 p_0^{(2,0,0,0,1)} (v'_1)^2 + 2 u'_{11} u'_{12} u'_{51} v'_5 p_1^{(0,1)} p_1^{(1,0)} p_5^{(1,0)} p_0^{(2,0,0,0,1)} (v'_1)^2 + \\
& (u'_{11})^2 u'_{42} v'_4 p_4^{(0,1)} (p_1^{(1,0)})^2 p_0^{(2,0,0,1,0)} (v'_1)^2 + 2 u'_{11} u'_{12} u'_{41} v'_4 p_1^{(0,1)} p_1^{(1,0)} p_4^{(1,0)} p_0^{(2,0,0,1,0)} (v'_1)^2 + \\
& (u'_{11})^2 u'_{32} v'_3 p_3^{(0,1)} (p_1^{(1,0)})^2 p_0^{(2,0,1,0,0)} (v'_1)^2 + 2 u'_{11} u'_{12} u'_{31} v'_3 p_1^{(0,1)} p_1^{(1,0)} p_3^{(1,0)} p_0^{(2,0,1,0,0)} (v'_1)^2 + (u'_{11})^2 u'_{22} v'_2 p_2^{(0,1)} (p_1^{(1,0)})^2 p_0^{(2,1,0,0,0)} (v'_1)^2 + \\
& 2 u'_{11} u'_{12} u'_{21} v'_2 p_1^{(0,1)} p_1^{(1,0)} p_2^{(1,0)} p_0^{(2,1,0,0,0)} (v'_1)^2 + u'_{12} u''_{11} p_1^{(1,1)} p_0^{(1,0,0,0,0)} v'_1 + (u'_{11})^2 u'_{12} p_1^{(2,1)} p_0^{(1,0,0,0,0)} v'_1 + \\
& u'_{12} (u'_{51})^2 v'_5 p_1^{(0,1)} (p_5^{(1,0)})^2 p_0^{(1,0,0,0,1)} v'_1 + u'_{52} v'_5 u''_{11} p_5^{(0,1)} p_1^{(1,0)} p_0^{(1,0,0,0,1)} v'_1 + u'_{12} v'_5 u''_{51} p_1^{(0,1)} p_5^{(1,0)} p_0^{(1,0,0,0,1)} v'_1 + \\
& 2 u'_{11} u'_{51} u'_{52} v'_5 p_1^{(0,1)} p_1^{(1,0)} p_5^{(1,0)} p_0^{(1,0,0,0,1)} v'_1 + 2 u'_{11} u'_{12} u'_{51} v'_5 p_5^{(1,0)} p_1^{(1,0)} p_0^{(1,0,0,0,1)} v'_1 + 2 u'_{11} u'_{51} u'_{52} v'_5 p_1^{(1,0)} p_5^{(1,1)} p_0^{(1,0,0,0,1)} v'_1 + \\
& (u'_{11})^2 u'_{52} v'_5 p_5^{(0,1)} p_1^{(2,0)} p_0^{(1,0,0,0,1)} v'_1 + u'_{12} (u'_{51})^2 v'_5 p_1^{(0,1)} p_5^{(2,0)} p_0^{(1,0,0,0,1)} v'_1 + u'_{12} (u'_{51})^2 (v'_5)^2 p_1^{(0,1)} (p_5^{(1,0)})^2 p_0^{(1,0,0,0,2)} v'_1 + \\
& 2 u'_{11} u'_{51} u'_{52} (v'_5)^2 p_5^{(0,1)} p_1^{(1,0)} p_5^{(1,0)} p_0^{(1,0,0,0,2)} v'_1 + u'_{12} (u'_{41})^2 v'_4 p_1^{(0,1)} (p_4^{(1,0)})^2 p_0^{(1,0,0,1,0)} v'_1 + u'_{42} v'_4 u''_{11} p_4^{(0,1)} p_1^{(1,0)} p_0^{(1,0,0,1,0)} v'_1 + \\
& u'_{12} v'_4 u''_{41} p_1^{(0,1)} p_4^{(1,0)} p_0^{(1,0,0,1,0)} v'_1 + 2 u'_{11} u'_{41} u'_{42} v'_4 p_4^{(0,1)} p_1^{(1,0)} p_4^{(1,0)} p_0^{(1,0,0,1,0)} v'_1 + 2 u'_{11} u'_{12} u'_{41} v'_4 p_4^{(0,1)} p_1^{(1,0)} p_0^{(1,0,0,1,0)} v'_1 + \\
& 2 u'_{11} u'_{41} u'_{42} v'_4 p_1^{(1,0)} p_4^{(1,1)} p_0^{(1,0,0,1,0)} v'_1 + (u'_{11})^2 u'_{42} v'_4 p_4^{(0,1)} p_1^{(2,0)} p_0^{(1,0,0,1,0)} v'_1 + u'_{12} (u'_{41})^2 v'_4 p_1^{(0,1)} p_4^{(2,0)} p_0^{(1,0,0,1,0)} v'_1 + \\
& 2 u'_{11} u'_{41} u'_{52} v'_4 v'_5 p_5^{(0,1)} p_1^{(1,0)} p_4^{(1,0)} p_0^{(1,0,0,1,1)} v'_1 + 2 u'_{11} u'_{42} u'_{51} v'_4 v'_5 p_4^{(0,1)} p_1^{(1,0)} p_5^{(1,0)} p_0^{(1,0,0,1,1)} v'_1 + \\
& 2 u'_{12} u'_{41} u'_{51} v'_4 v'_5 p_1^{(0,1)} p_4^{(1,0)} p_5^{(1,0)} p_0^{(1,0,0,1,1)} v'_1 + u'_{12} (u'_{41})^2 (v'_4)^2 p_1^{(0,1)} (p_4^{(1,0)})^2 p_0^{(1,0,0,2,0)} v'_1 + \\
& 2 u'_{11} u'_{41} u'_{42} (v'_4)^2 p_4^{(0,1)} p_1^{(1,0)} p_4^{(1,0)} p_0^{(1,0,0,2,0)} v'_1 + u'_{12} (u'_{31})^2 v'_3 p_1^{(0,1)} (p_3^{(1,0)})^2 p_0^{(1,0,1,0,0)} v'_1 + u'_{32} v'_3 u''_{11} p_3^{(0,1)} p_1^{(1,0)} p_0^{(1,0,1,0,0)} v'_1 + \\
& u'_{12} v'_3 u''_{31} p_1^{(0,1)} p_3^{(1,0)} p_0^{(1,0,1,0,0)} v'_1 + 2 u'_{11} u'_{31} u'_{32} v'_3 p_3^{(0,1)} p_1^{(1,0)} p_3^{(1,0)} p_0^{(1,0,1,0,0)} v'_1 + 2 u'_{11} u'_{12} u'_{31} v'_3 p_3^{(1,0)} p_1^{(1,1)} p_0^{(1,0,1,0,0)} v'_1 + \\
& 2 u'_{11} u'_{31} u'_{32} v'_3 p_1^{(1,0)} p_3^{(1,1)} p_0^{(1,0,1,0,0)} v'_1 + (u'_{11})^2 u'_{32} v'_3 p_3^{(0,1)} p_1^{(2,0)} p_0^{(1,0,1,0,0)} v'_1 + u'_{12} (u'_{31})^2 v'_3 p_1^{(0,1)} p_3^{(2,0)} p_0^{(1,0,1,0,0)} v'_1 + \\
& 2 u'_{11} u'_{31} u'_{52} v'_3 v'_5 p_5^{(0,1)} p_1^{(1,0)} p_3^{(1,0)} p_0^{(1,0,1,0,1)} v'_1 + 2 u'_{11} u'_{32} u'_{51} v'_3 v'_5 p_3^{(0,1)} p_1^{(1,0)} p_5^{(1,0)} p_0^{(1,0,1,0,1)} v'_1 + \\
& 2 u'_{12} u'_{31} u'_{51} v'_3 v'_5 p_1^{(0,1)} p_3^{(1,0)} p_5^{(1,0)} p_0^{(1,0,1,0,1)} v'_1 + 2 u'_{11} u'_{31} u'_{42} v'_3 v'_4 p_4^{(0,1)} p_1^{(1,0)} p_3^{(1,0)} p_0^{(1,0,1,1,0)} v'_1 + \\
& 2 u'_{11} u'_{32} u'_{41} v'_3 v'_4 p_1^{(0,1)} p_4^{(1,0)} p_0^{(1,0,1,1,0)} v'_1 + 2 u'_{12} u'_{31} u'_{41} v'_3 v'_4 p_1^{(0,1)} p_3^{(1,0)} p_4^{(1,0)} p_0^{(1,0,1,1,0)} v'_1 + \\
& u'_{12} (u'_{31})^2 (v'_3)^2 p_1^{(0,1)} (p_3^{(1,0)})^2 p_0^{(1,0,2,0,0)} v'_1 + 2 u'_{11} u'_{31} u'_{32} (v'_3)^2 p_3^{(0,1)} p_1^{(1,0)} p_3^{(1,0)} p_0^{(1,0,2,0,0)} v'_1 + u'_{12} (u'_{21})^2 v'_2 p_1^{(0,1)} (p_2^{(1,0)})^2 p_0^{(1,1,0,0,0)} v'_1 + \\
& u'_{22} v'_2 u''_{11} p_1^{(0,1)} p_2^{(1,0)} p_0^{(1,1,0,0,0)} v'_1 + u'_{12} v'_2 u''_{21} p_1^{(0,1)} p_2^{(1,0)} p_0^{(1,1,0,0,0)} v'_1 + 2 u'_{11} u'_{21} u'_{22} v'_2 p_2^{(0,1)} p_1^{(1,0)} p_0^{(1,1,0,0,0)} v'_1 + \\
& 2 u'_{11} u'_{12} u'_{21} v'_2 p_2^{(1,0)} p_1^{(1,1)} p_0^{(1,1,0,0,0)} v'_1 + 2 u'_{11} u'_{21} u'_{22} v'_2 p_1^{(1,0)} p_2^{(1,1)} p_0^{(1,1,0,0,0)} v'_1 + (u'_{11})^2 u'_{22} v'_2 p_2^{(0,1)} p_1^{(2,0)} p_0^{(1,1,0,0,0)} v'_1 + \\
& u'_{12} (u'_{21})^2 v'_2 p_1^{(0,1)} p_2^{(2,0)} p_0^{(1,1,0,0,0)} v'_1 + 2 u'_{11} u'_{21} u'_{52} v'_2 v'_5 p_5^{(0,1)} p_1^{(1,0)} p_2^{(1,0)} p_0^{(1,1,0,0,1)} v'_1 + 2 u'_{11} u'_{22} u'_{51} v'_2 v'_5 p_2^{(0,1)} p_1^{(1,0)} p_5^{(1,0)} p_0^{(1,1,0,0,1)} v'_1 + \\
& 2 u'_{12} u'_{21} u'_{51} v'_2 v'_5 p_1^{(0,1)} p_2^{(1,0)} p_5^{(1,0)} p_0^{(1,1,0,0,1)} v'_1 + 2 u'_{11} u'_{21} u'_{42} v'_2 v'_4 p_4^{(0,1)} p_1^{(1,0)} p_2^{(1,0)} p_0^{(1,1,0,1,0)} v'_1 + \\
& 2 u'_{11} u'_{22} u'_{41} v'_2 v'_4 p_2^{(0,1)} p_1^{(1,0)} p_4^{(1,0)} p_0^{(1,1,0,1,0)} v'_1 + 2 u'_{12} u'_{21} u'_{41} v'_2 v'_4 p_1^{(0,1)} p_2^{(1,0)} p_4^{(1,0)} p_0^{(1,1,0,1,0)} v'_1 + \\
& 2 u'_{11} u'_{21} u'_{32} v'_2 v'_3 p_3^{(0,1)} p_1^{(1,0)} p_2^{(1,0)} p_0^{(1,1,1,0,0)} v'_1 + 2 u'_{11} u'_{22} u'_{31} v'_2 v'_3 p_2^{(0,1)} p_1^{(1,0)} p_3^{(1,0)} p_0^{(1,1,1,0,0)} v'_1 + \\
& 2 u'_{12} u'_{21} u'_{31} v'_2 v'_3 p_1^{(0,1)} p_2^{(1,0)} p_3^{(1,0)} p_0^{(1,1,1,0,0)} v'_1 + u'_{12} (u'_{21})^2 (v'_2)^2 p_1^{(0,1)} (p_2^{(1,0)})^2 p_0^{(1,2,0,0,0)} v'_1 + \\
& 2 u'_{11} u'_{21} u'_{22} (v'_2)^2 p_2^{(0,1)} p_1^{(1,0)} p_2^{(1,0)} p_0^{(1,2,0,0,0)} v'_1 + 3 (u'_{11})^2 u'_{12} v'_1 p_1^{(0,1)} (p_1^{(1,0)})^2 p_0^{(2,0,0,0,0)} v'_1 + (u'_{51})^2 u'_{52} v'_5 p_5^{(0,1)} (p_5^{(1,0)})^2 p_0^{(0,0,0,0,1)} + \\
& u'_{52} u''_{51} v'_5 p_5^{(0,1)} p_5^{(1,0)} p_0^{(0,0,0,0,1)} + u'_{52} v'_5 u''_{51} p_5^{(1,1)} p_0^{(0,0,0,0,1)} + 2 (u'_{51})^2 u'_{52} v'_5 p_5^{(1,0)} p_5^{(1,1)} p_0^{(0,0,0,0,1)} + \\
& (u'_{51})^2 u'_{52} v'_5 p_5^{(0,1)} p_5^{(2,0)} p_0^{(0,0,0,0,1)} + (u'_{51})^2 u'_{52} v'_5 p_5^{(2,1)} p_0^{(0,0,0,0,1)} + 3 (u'_{51})^2 u'_{52} v'_5 p_5^{(0,1)} (p_5^{(1,0)})^2 p_0^{(0,0,0,0,2)} + \\
& u'_{52} (v'_5)^2 u''_{51} p_5^{(0,1)} p_5^{(1,0)} p_0^{(0,0,0,0,2)} + 2 (u'_{51})^2 u'_{52} (v'_5)^2 p_5^{(1,0)} p_5^{(1,1)} p_0^{(0,0,0,0,2)} + (u'_{51})^2 u'_{52} (v'_5)^2 p_5^{(0,1)} p_5^{(2,0)} p_0^{(0,0,0,0,2)} + \\
& (u'_{51})^2 u'_{52} (v'_5)^3 p_5^{(0,1)} (p_5^{(1,0)})^2 p_0^{(0,0,0,0,3)} + (u'_{41})^2 u'_{42} v'_4 p_4^{(0,1)} (p_4^{(1,0)})^2 p_0^{(0,0,0,1,0)} + u'_{42} u'_{41} v'_4 p_4^{(0,1)} p_4^{(1,0)} p_0^{(0,0,0,1,0)} + \\
& u'_{42} v'_4 u''_{41} p_4^{(1,1)} p_0^{(0,0,0,1,0)} + 2 (u'_{41})^2 u'_{42} v'_4 p_4^{(1,0)} p_4^{(1,1)} p_0^{(0,0,0,1,0)} + (u'_{41})^2 u'_{42} v'_4 p_4^{(0,1)} p_4^{(2,0)} p_0^{(0,0,0,1,0)} + \\
& (u'_{41})^2 u'_{42} v'_4 p_4^{(2,1)} p_0^{(0,0,0,1,0)} + (u'_{41})^2 u'_{52} v'_5 v'_4 p_5^{(0,1)} (p_4^{(1,0)})^2 p_0^{(0,0,0,1,1)} + u'_{42} (u'_{51})^2 v'_4 v'_5 p_4^{(0,1)} (p_5^{(1,0)})^2 p_0^{(0,0,0,1,1)} + \\
& u'_{52} v'_4 v'_5 u''_{41} p_4^{(0,1)} p_4^{(1,0)} p_0^{(0,0,0,1,1)} + u'_{42} v'_4 v'_5 u''_{51} p_4^{(0,1)} p_5^{(1,0)} p_0^{(0,0,0,1,1)} + 2 u'_{41} u'_{42} u'_{51} v'_4 v'_5 p_4^{(0,1)} p_4^{(1,0)} p_5^{(1,0)} p_0^{(0,0,0,1,1)} + \\
& 2 u'_{41} u'_{51} u'_{52} v'_4 v'_5 p_5^{(0,1)} p_4^{(1,0)} p_5^{(1,0)} p_0^{(0,0,0,1,1)} + 2 u'_{41} u'_{42} u'_{51} v'_4 v'_5 p_5^{(1,0)} p_4^{(1,0)} p_0^{(0,0,0,1,1)} + 2 u'_{41} u'_{51} u'_{52} v'_4 v'_5 p_4^{(1,0)} p_5^{(1,1)} p_0^{(0,0,0,1,1)} + \\
& (u'_{41})^2 u'_{52} v'_4 v'_5 p_5^{(0,1)} p_4^{(2,0)} p_0^{(0,0,0,1,1)} + u'_{42} (u'_{51})^2 v'_4 v'_5 p_5^{(2,0)} p_0^{(0,0,0,1,1)} + u'_{42} (u'_{51})^2 v'_4 (v'_5)^2 p_4^{(0,1)} (p_5^{(1,0)})^2 p_0^{(0,0,0,1,2)} + \\
& 2 u'_{41} u'_{51} u'_{52} v'_4 (v'_5)^2 p_5^{(0,1)} p_4^{(1,0)} p_5^{(1,0)} p_0^{(0,0,0,1,2)} + 3 (u'_{41})^2 u'_{42} v'_4 v'_4 p_4^{(0,1)} (p_4^{(1,0)})^2 p_0^{(0,0,0,2,0)} + u'_{42} (v'_4)^2 u''_{41} p_4^{(0,1)} p_4^{(1,0)} p_0^{(0,0,0,2,0)} +
\end{aligned}$$

$$\begin{aligned}
& 2(u'_{41})^2 u'_{42} (v'_4)^2 p_4^{(1,0)} p_4^{(1,1)} p_0^{(0,0,0,2,0)} + (u'_{41})^2 u'_{42} (v'_4)^2 p_4^{(0,1)} p_4^{(2,0)} p_0^{(0,0,0,2,0)} + (u'_{41})^2 u'_{52} (v'_4)^2 v'_5 p_5^{(0,1)} (p_4^{(1,0)})^2 p_0^{(0,0,0,2,1)} + \\
& 2 u'_{41} u'_{42} u'_{51} (v'_4)^2 v'_5 p_4^{(0,1)} p_4^{(1,0)} p_5^{(1,0)} p_0^{(0,0,0,2,1)} + (u'_{41})^2 u'_{42} (v'_4)^3 p_4^{(0,1)} (p_4^{(1,0)})^2 p_0^{(0,0,0,3,0)} + (u'_{31})^2 u'_{32} v_3^{(3)} p_3^{(0,1)} (p_3^{(1,0)})^2 p_0^{(0,0,1,0,0)} + \\
& u'_{32} u'_{31} v_3^{(0,1)} p_3^{(1,0)} p_0^{(0,0,1,0,0)} + u'_{32} v_3 u'_{31} p_3^{(1,1)} p_0^{(0,0,1,0,0)} + 2(u'_{31})^2 u'_{32} v_3 p_3^{(1,0)} p_3^{(1,1)} p_0^{(0,0,1,0,0)} + (u'_{31})^2 u'_{32} v_3 p_3^{(0,1)} p_3^{(2,0)} p_0^{(0,0,1,0,0)} + \\
& (u'_{31})^2 u'_{32} v_3 p_3^{(2,1)} p_0^{(0,0,1,0,0)} + (u'_{31})^2 u'_{52} v_5 v'_3 p_5^{(0,1)} (p_3^{(1,0)})^2 p_0^{(0,0,1,0,1)} + u'_{32} (u'_{51})^2 v_3 v'_5 p_3^{(0,1)} (p_5^{(1,0)})^2 p_0^{(0,0,1,0,1)} + \\
& u'_{52} v_3 v'_5 u'_{31} p_5^{(0,1)} p_3^{(1,0)} p_0^{(0,0,1,0,1)} + u'_{32} v_3 v'_5 u'_{51} p_3^{(0,1)} p_5^{(1,0)} p_0^{(0,0,1,0,1)} + 2 u'_{31} u'_{32} u'_{51} v_5 v'_3 p_3^{(0,1)} p_3^{(1,0)} p_0^{(0,0,1,0,1)} + \\
& 2 u'_{31} u'_{51} u'_{52} v_3 v'_5 p_5^{(0,1)} p_3^{(1,0)} p_5^{(1,0)} p_0^{(0,0,1,0,1)} + 2 u'_{31} u'_{32} u'_{51} v_3 v'_5 p_5^{(1,0)} p_3^{(1,1)} p_0^{(0,0,1,0,1)} + 2 u'_{31} u'_{51} u'_{52} v_3 v'_5 p_3^{(1,0)} p_5^{(1,1)} p_0^{(0,0,1,0,1)} + \\
& (u'_{31})^2 u'_{52} v_3 v'_5 p_5^{(0,1)} p_3^{(2,0)} p_0^{(0,0,1,0,1)} + u'_{32} (u'_{51})^2 v_3 v'_5 p_3^{(0,1)} p_5^{(2,0)} p_0^{(0,0,1,0,1)} + u'_{32} (u'_{51})^2 v_3 (v'_5)^2 p_3^{(0,1)} (p_5^{(1,0)})^2 p_0^{(0,0,1,0,2)} + \\
& 2 u'_{31} u'_{51} u'_{52} v_3 (v'_5)^2 p_5^{(0,1)} p_3^{(1,0)} p_5^{(1,0)} p_0^{(0,0,1,0,2)} + (u'_{31})^2 u'_{42} v_4 v'_3 p_4^{(0,1)} (p_3^{(1,0)})^2 p_0^{(0,0,1,1,0)} + u'_{32} (u'_{41})^2 v_3 v'_4 p_3^{(0,1)} (p_4^{(1,0)})^2 p_0^{(0,0,1,1,0)} + \\
& u'_{42} v_3 v'_4 u'_{31} p_4^{(0,1)} p_3^{(1,0)} p_0^{(0,0,1,1,0)} + u'_{32} v_3 v'_4 u'_{41} p_3^{(0,1)} p_4^{(1,0)} p_0^{(0,0,1,1,0)} + 2 u'_{31} u'_{32} u'_{41} v_4 v'_3 p_3^{(0,1)} p_3^{(1,0)} p_0^{(0,0,1,1,0)} + \\
& 2 u'_{31} u'_{41} u'_{42} v_3 v'_4 p_4^{(0,1)} p_3^{(1,0)} p_4^{(1,0)} p_0^{(0,0,1,1,0)} + 2 u'_{31} u'_{41} u'_{42} v_3 v'_4 p_4^{(1,0)} p_3^{(1,1)} p_0^{(0,0,1,1,0)} + 2 u'_{31} u'_{41} u'_{42} v_3 v'_4 p_4^{(1,0)} p_4^{(1,1)} p_0^{(0,0,1,1,0)} + \\
& (u'_{31})^2 u'_{42} v_3 v'_4 p_4^{(0,1)} p_3^{(2,0)} p_0^{(0,0,1,1,0)} + u'_{32} (u'_{41})^2 v_3 v'_4 p_3^{(0,1)} p_4^{(2,0)} p_0^{(0,0,1,1,0)} + 2 u'_{31} u'_{41} u'_{52} v_3 v'_4 v'_5 p_5^{(0,1)} p_3^{(1,0)} p_4^{(1,0)} p_0^{(0,0,1,1,1)} + \\
& 2 u'_{31} u'_{42} u'_{51} v_3 v'_4 v'_5 p_4^{(0,1)} p_3^{(1,0)} p_5^{(1,0)} p_0^{(0,0,1,1,1)} + 2 u'_{32} u'_{41} u'_{51} v_3 v'_4 v'_5 p_3^{(0,1)} p_4^{(1,0)} p_5^{(1,0)} p_0^{(0,0,1,1,1)} + \\
& u'_{32} (u'_{41})^2 v_3 (v'_4)^2 p_3^{(0,1)} (p_4^{(1,0)})^2 p_0^{(0,0,1,2,0)} + 2 u'_{31} u'_{41} u'_{42} v_3 (v'_4)^2 p_4^{(0,1)} p_3^{(1,0)} p_4^{(1,0)} p_0^{(0,0,1,2,0)} + 3 (u'_{31})^2 u'_{32} v_3 v'_3 p_3^{(0,1)} (p_3^{(1,0)})^2 p_0^{(0,0,2,0,0)} + \\
& u'_{32} (v_3)^2 u'_{31} p_3^{(0,1)} p_3^{(1,0)} p_0^{(0,0,2,0,0)} + 2 (u'_{31})^2 u'_{32} (v_3)^2 p_3^{(1,0)} p_3^{(1,1)} p_0^{(0,0,2,0,0)} + (u'_{31})^2 u'_{32} (v_3)^2 p_3^{(0,1)} p_3^{(2,0)} p_0^{(0,0,2,0,0)} + \\
& (u'_{31})^2 u'_{52} (v_3)^2 v'_5 p_5^{(0,1)} (p_3^{(1,0)})^2 p_0^{(0,0,2,0,1)} + 2 u'_{31} u'_{32} u'_{51} (v_3)^2 v'_5 p_3^{(0,1)} p_3^{(1,0)} p_5^{(1,0)} p_0^{(0,0,2,0,1)} + (u'_{31})^2 u'_{42} (v_3)^2 v'_4 p_4^{(0,1)} (p_3^{(1,0)})^2 p_0^{(0,0,2,1,0)} + \\
& 2 u'_{31} u'_{32} u'_{41} (v_3)^2 v'_4 p_3^{(0,1)} p_3^{(1,0)} p_4^{(1,0)} p_0^{(0,0,2,1,0)} + (u'_{31})^2 u'_{32} (v_3)^3 p_3^{(0,1)} (p_3^{(1,0)})^2 p_0^{(0,0,3,0,0)} + (u'_{21})^2 u'_{22} v_2^{(3)} p_2^{(0,1)} (p_2^{(1,0)})^2 p_0^{(0,1,0,0,0)} + \\
& u'_{22} u'_{21} v_2^{(2,1)} p_2^{(1,0)} p_2^{(1,0)} p_0^{(0,1,0,0,0)} + u'_{22} v_2 u'_{21} p_2^{(1,1)} p_0^{(0,1,0,0,0)} + 2 (u'_{21})^2 u'_{22} v_2 p_2^{(1,0)} p_2^{(1,1)} p_0^{(0,1,0,0,0)} + (u'_{21})^2 u'_{22} v_2 p_2^{(0,1)} p_2^{(2,0)} p_0^{(0,1,0,0,0)} + \\
& (u'_{21})^2 u'_{22} v_2 p_2^{(2,1)} p_0^{(0,1,0,0,0)} + (u'_{21})^2 u'_{52} v_5 v'_2 p_5^{(0,1)} (p_2^{(1,0)})^2 p_0^{(0,1,0,0,1)} + u'_{22} (u'_{51})^2 v_2 v'_5 p_2^{(0,1)} (p_5^{(1,0)})^2 p_0^{(0,1,0,0,1)} + \\
& u'_{52} v_2 v'_5 u'_{21} p_5^{(0,1)} p_2^{(1,0)} p_0^{(0,1,0,0,1)} + u'_{22} v_2 v'_5 u'_{51} p_2^{(0,1)} p_5^{(1,0)} p_0^{(0,1,0,0,1)} + 2 u'_{21} u'_{22} u'_{51} v_2 v'_5 p_2^{(0,1)} p_2^{(1,0)} p_5^{(1,0)} p_0^{(0,1,0,0,1)} + \\
& 2 u'_{21} u'_{51} u'_{52} v_2 v'_5 p_5^{(0,1)} p_2^{(1,0)} p_5^{(1,0)} p_0^{(0,1,0,0,1)} + 2 u'_{21} u'_{22} u'_{51} v_2 v'_5 p_5^{(1,0)} p_2^{(1,1)} p_0^{(0,1,0,0,1)} + 2 u'_{21} u'_{51} u'_{52} v_2 v'_5 p_2^{(1,0)} p_5^{(1,1)} p_0^{(0,1,0,0,1)} + \\
& (u'_{21})^2 u'_{52} v_2 v'_5 p_5^{(0,1)} p_2^{(2,0)} p_0^{(0,1,0,0,1)} + u'_{22} (u'_{51})^2 v_2 v'_5 p_2^{(0,1)} p_5^{(2,0)} p_0^{(0,1,0,0,1)} + u'_{22} (u'_{51})^2 v_2 (v'_5)^2 p_2^{(0,1)} (p_5^{(1,0)})^2 p_0^{(0,1,0,0,2)} + \\
& 2 u'_{21} u'_{51} u'_{52} v_2 (v'_5)^2 p_5^{(0,1)} p_2^{(1,0)} p_5^{(1,0)} p_0^{(0,1,0,0,2)} + (u'_{21})^2 u'_{42} v_4 v'_2 p_4^{(0,1)} (p_2^{(1,0)})^2 p_0^{(0,1,0,1,0)} + u'_{22} (u'_{41})^2 v_2 v'_4 p_2^{(0,1)} (p_4^{(1,0)})^2 p_0^{(0,1,0,1,0)} + \\
& u'_{42} v_2 v'_4 u'_{21} p_4^{(0,1)} p_2^{(1,0)} p_0^{(0,1,0,1,0)} + u'_{22} v_2 v'_4 u'_{41} p_2^{(0,1)} p_4^{(1,0)} p_0^{(0,1,0,1,0)} + 2 u'_{21} u'_{22} u'_{41} v_4 v'_2 p_2^{(0,1)} p_2^{(1,0)} p_4^{(1,0)} p_0^{(0,1,0,1,0)} + \\
& 2 u'_{21} u'_{41} u'_{42} v_2 v'_4 p_4^{(0,1)} p_2^{(1,0)} p_4^{(1,0)} p_0^{(0,1,0,1,0)} + 2 u'_{21} u'_{22} u'_{41} v_2 v'_4 p_4^{(1,0)} p_2^{(1,1)} p_0^{(0,1,0,1,0)} + 2 u'_{21} u'_{41} u'_{42} v_2 v'_4 p_2^{(1,0)} p_4^{(1,1)} p_0^{(0,1,0,1,0)} + \\
& (u'_{21})^2 u'_{42} v_2 v'_4 p_4^{(0,1)} p_2^{(2,0)} p_0^{(0,1,0,1,0)} + u'_{22} (u'_{41})^2 v_2 v'_4 p_2^{(0,1)} p_4^{(2,0)} p_0^{(0,1,0,1,0)} + 2 u'_{21} u'_{41} u'_{52} v_2 v'_4 v'_5 p_5^{(0,1)} p_2^{(1,0)} p_4^{(1,0)} p_0^{(0,1,0,1,1)} + \\
& 2 u'_{21} u'_{42} u'_{51} v_2 v'_4 v'_5 p_4^{(0,1)} p_2^{(1,0)} p_5^{(1,0)} p_0^{(0,1,0,1,1)} + 2 u'_{22} u'_{41} u'_{51} v_2 v'_4 v'_5 p_2^{(0,1)} p_4^{(1,0)} p_5^{(1,0)} p_0^{(0,1,0,1,1)} + \\
& u'_{22} (u'_{41})^2 v_2 (v'_4)^2 p_2^{(0,1)} (p_4^{(1,0)})^2 p_0^{(0,1,0,2,0)} + 2 u'_{21} u'_{41} u'_{42} v_2 (v'_4)^2 p_4^{(0,1)} p_2^{(1,0)} p_4^{(1,0)} p_0^{(0,1,0,2,0)} + (u'_{21})^2 u'_{32} v_3 v'_2 p_3^{(0,1)} (p_2^{(1,0)})^2 p_0^{(0,1,1,0,0)} + \\
& u'_{22} (u'_{31})^2 v_2 v'_3 p_2^{(0,1)} (p_3^{(1,0)})^2 p_0^{(0,1,1,0,0)} + u'_{32} v_2 v'_3 u'_{21} p_3^{(0,1)} p_2^{(1,0)} p_0^{(0,1,1,0,0)} + u'_{22} v_2 v'_3 u'_{31} p_2^{(0,1)} p_3^{(1,0)} p_0^{(0,1,1,0,0)} + \\
& 2 u'_{21} u'_{22} u'_{31} v_2 v'_3 p_2^{(0,1)} p_2^{(1,0)} p_3^{(1,0)} p_0^{(0,1,1,0,0)} + 2 u'_{21} u'_{31} u'_{32} v_2 v'_3 p_3^{(0,1)} p_2^{(1,0)} p_3^{(1,0)} p_0^{(0,1,1,0,0)} + 2 u'_{21} u'_{22} u'_{31} v_2 v'_3 p_3^{(1,0)} p_2^{(1,1)} p_0^{(0,1,1,0,0)} + \\
& 2 u'_{21} u'_{31} u'_{32} v_2 v'_3 p_2^{(1,0)} p_3^{(1,1)} p_0^{(0,1,1,0,0)} + (u'_{21})^2 u'_{32} v_2 v'_3 p_3^{(0,1)} p_2^{(2,0)} p_0^{(0,1,1,0,0)} + u'_{22} (u'_{31})^2 v_2 v'_3 p_2^{(0,1)} p_3^{(2,0)} p_0^{(0,1,1,0,0)} + \\
& 2 u'_{21} u'_{31} u'_{52} v_2 v'_3 v'_5 p_5^{(0,1)} p_2^{(1,0)} p_3^{(1,0)} p_0^{(0,1,1,0,1)} + 2 u'_{21} u'_{32} u'_{51} v_2 v'_3 v'_5 p_3^{(0,1)} p_2^{(1,0)} p_5^{(1,0)} p_0^{(0,1,1,0,1)} + \\
& 2 u'_{22} u'_{31} u'_{51} v_2 v'_3 v'_5 p_2^{(0,1)} p_3^{(1,0)} p_5^{(1,0)} p_0^{(0,1,1,0,1)} + 2 u'_{21} u'_{31} u'_{42} v_2 v'_3 v'_4 p_4^{(0,1)} p_2^{(1,0)} p_3^{(1,0)} p_0^{(0,1,1,1,0)} + \\
& 2 u'_{21} u'_{32} u'_{41} v_2 v'_3 v'_4 p_3^{(0,1)} p_2^{(1,0)} p_4^{(1,0)} p_0^{(0,1,1,1,0)} + 2 u'_{22} u'_{31} u'_{41} v_2 v'_3 v'_4 p_2^{(0,1)} p_3^{(1,0)} p_4^{(1,0)} p_0^{(0,1,1,1,0)} + \\
& u'_{22} (u'_{31})^2 v_2 (v'_3)^2 p_2^{(0,1)} (p_3^{(1,0)})^2 p_0^{(0,1,2,0,0)} + 2 u'_{21} u'_{31} u'_{32} v_2 (v'_3)^2 p_3^{(0,1)} p_2^{(1,0)} p_3^{(1,0)} p_0^{(0,1,2,0,0)} + \\
& 3 (u'_{21})^2 u'_{22} v_2 v'_2 p_2^{(0,1)} (p_2^{(1,0)})^2 p_0^{(0,2,0,0,0)} + u'_{22} (v'_2)^2 u'_{21} p_2^{(0,1)} p_2^{(1,0)} p_0^{(0,2,0,0,0)} + 2 (u'_{21})^2 u'_{22} (v'_2)^2 p_2^{(1,0)} p_2^{(1,1)} p_0^{(0,2,0,0,0)} + \\
& (u'_{21})^2 u'_{22} (v'_2)^2 p_2^{(0,1)} p_2^{(2,0)} p_0^{(0,2,0,0,0)} + (u'_{21})^2 u'_{52} (v'_2)^2 v'_5 p_5^{(0,1)} (p_2^{(1,0)})^2 p_0^{(0,2,0,0,1)} + 2 u'_{21} u'_{22} u'_{51} (v'_2)^2 v'_5 p_2^{(0,1)} p_2^{(1,0)} p_5^{(1,0)} p_0^{(0,2,0,0,1)} + \\
& (u'_{21})^2 u'_{42} (v'_2)^2 v'_4 p_4^{(0,1)} (p_2^{(1,0)})^2 p_0^{(0,2,0,1,0)} + 2 u'_{21} u'_{22} u'_{41} (v'_2)^2 v'_4 p_2^{(0,1)} p_2^{(1,0)} p_4^{(1,0)} p_0^{(0,2,0,1,0)} + \\
& (u'_{21})^2 u'_{32} (v'_2)^2 v'_3 p_3^{(0,1)} (p_2^{(1,0)})^2 p_0^{(0,2,1,0,0)} + 2 u'_{21} u'_{22} u'_{31} (v'_2)^2 v'_3 p_2^{(0,1)} p_2^{(1,0)} p_3^{(1,0)} p_0^{(0,2,1,0,0)} + (u'_{21})^2 u'_{22} (v'_2)^3 p_2^{(0,1)} (p_2^{(1,0)})^2 p_0^{(0,3,0,0,0)} + \\
& (u'_{11})^2 u'_{12} v_1^{(3)} p_1^{(0,1)} (p_1^{(1,0)})^2 p_0^{(1,0,0,0,0)} + u'_{12} u'_{11} v_1^{(0,1)} p_1^{(1,0)} p_0^{(1,0,0,0,0)} + 2 (u'_{11})^2 u'_{12} v_1^{(1,0)} p_1^{(1,1)} p_0^{(1,0,0,0,0)} + \\
& (u'_{11})^2 u'_{12} v_1^{(0,1)} p_1^{(2,0)} p_0^{(1,0,0,0,0)} + (u'_{11})^2 u'_{52} v_5 v'_1 p_5^{(0,1)} (p_1^{(1,0)})^2 p_0^{(1,0,0,0,1)} + 2 u'_{11} u'_{12} u'_{51} v_5 v'_1 p_1^{(0,1)} p_1^{(1,0)} p_5^{(1,0)} p_0^{(1,0,0,0,1)} + \\
& (u'_{11})^2 u'_{42} v_4 v'_1 p_4^{(0,1)} (p_1^{(1,0)})^2 p_0^{(1,0,0,1,0)} + 2 u'_{11} u'_{12} u'_{41} v_4 v'_1 p_1^{(0,1)} p_1^{(1,0)} p_4^{(1,0)} p_0^{(1,0,0,1,0)} + (u'_{11})^2 u'_{32} v_3 v'_1 p_3^{(0,1)} (p_1^{(1,0)})^2 p_0^{(1,0,1,0,0)} + \\
& 2 u'_{11} u'_{12} u'_{31} v_3 v'_1 p_1^{(0,1)} p_1^{(1,0)} p_3^{(1,0)} p_0^{(1,0,1,0,0)} + (u'_{11})^2 u'_{22} v_2 v'_1 p_2^{(0,1)} (p_1^{(1,0)})^2 p_0^{(1,1,0,0,0)} + 2 u'_{11} u'_{12} u'_{21} v_2 v'_1 p_1^{(0,1)} p_1^{(1,0)} p_2^{(1,0)} p_0^{(1,1,0,0,0)}
\end{aligned}$$

A3.6. Vierte Ableitung

```
d4h[x1_, x2_] = D[h[x1, x2], x1, x1, x2, x2];
d4h00 = StringReplace[ToString[Expand[d4h[0, 0]], FormatType -> InputForm],
  {"[0, 0, 0, 0, 0]" -> "", "[0, 0]" -> "", "[0]" -> ""}];
Print[1 + Count[Characters[d4h00], "+"], " Terme:"];
ToExpression[d4h00]
```

1510 Terme:

$$\begin{aligned}
& (u'_{11})^2 (u'_{12})^2 (p_1^{(0,1)})^2 (p_1^{(1,0)})^2 p_0^{(4,0,0,0,0)} (v'_1)^4 + (u'_{11})^2 u''_{12} p_1^{(0,1)} (p_1^{(1,0)})^2 p_0^{(3,0,0,0,0)} (v'_1)^3 + (u'_{11})^2 (u'_{12})^2 p_1^{(0,2)} (p_1^{(1,0)})^2 p_0^{(3,0,0,0,0)} (v'_1)^3 + \\
& (u'_{12})^2 u''_{11} (p_1^{(0,1)})^2 p_1^{(1,0)} p_0^{(3,0,0,0,0)} (v'_1)^3 + 4 (u'_{11})^2 (u'_{12})^2 p_1^{(0,1)} p_1^{(1,0)} p_1^{(1,1)} p_0^{(3,0,0,0,0)} (v'_1)^3 + (u'_{11})^2 (u'_{12})^2 (p_1^{(0,1)})^2 p_1^{(2,0)} p_0^{(3,0,0,0,0)} (v'_1)^3 + \\
& 2 (u'_{11})^2 u'_{12} u'_{52} v'_5 p_1^{(0,1)} p_5^{(0,1)} (p_1^{(1,0)})^2 p_0^{(3,0,0,0,1)} (v'_1)^3 + 2 u'_{11} (u'_{12})^2 u'_{51} v'_5 (p_1^{(0,1)})^2 p_1^{(1,0)} p_5^{(1,0)} p_0^{(3,0,0,0,1)} (v'_1)^3 + \\
& 2 (u'_{11})^2 u'_{12} u'_{42} v'_4 p_1^{(0,1)} p_4^{(0,1)} (p_1^{(1,0)})^2 p_0^{(3,0,0,1,0)} (v'_1)^3 + 2 u'_{11} (u'_{12})^2 u'_{41} v'_4 (p_1^{(0,1)})^2 p_1^{(1,0)} p_4^{(1,0)} p_0^{(3,0,0,1,0)} (v'_1)^3 + \\
& 2 (u'_{11})^2 u'_{12} u'_{32} v'_3 p_1^{(0,1)} p_3^{(0,1)} (p_1^{(1,0)})^2 p_0^{(3,0,1,0,0)} (v'_1)^3 + 2 u'_{11} (u'_{12})^2 u'_{31} v'_3 (p_1^{(0,1)})^2 p_1^{(1,0)} p_3^{(1,0)} p_0^{(3,0,1,0,0)} (v'_1)^3 + \\
& 2 (u'_{11})^2 u'_{12} u'_{22} v'_2 p_1^{(0,1)} p_2^{(0,1)} (p_1^{(1,0)})^2 p_0^{(3,1,0,0,0)} (v'_1)^3 + 2 u'_{11} (u'_{12})^2 u'_{21} v'_2 (p_1^{(0,1)})^2 p_1^{(1,0)} p_2^{(1,0)} p_0^{(3,1,0,0,0)} (v'_1)^3 + \\
& 2 (u'_{11})^2 (u'_{12})^2 (p_1^{(1,1)})^2 p_0^{(2,0,0,0,0)} (v'_1)^2 + u''_{11} u''_{12} p_1^{(0,1)} p_1^{(1,0)} p_0^{(2,0,0,0,0)} (v'_1)^2 + (u'_{12})^2 u''_{11} p_1^{(0,2)} p_1^{(1,0)} p_0^{(2,0,0,0,0)} (v'_1)^2 + \\
& 2 (u'_{12})^2 u''_{11} p_1^{(0,1)} p_1^{(1,1)} p_0^{(2,0,0,0,0)} (v'_1)^2 + 2 (u'_{11})^2 u''_{12} p_1^{(1,0)} p_1^{(1,1)} p_0^{(2,0,0,0,0)} (v'_1)^2 + 2 (u'_{11})^2 (u'_{12})^2 p_1^{(1,0)} p_1^{(1,2)} p_0^{(2,0,0,0,0)} (v'_1)^2 + \\
& (u'_{11})^2 u''_{12} p_1^{(0,1)} p_1^{(2,0)} p_0^{(2,0,0,0,0)} (v'_1)^2 + (u'_{11})^2 (u'_{12})^2 p_1^{(0,2)} p_1^{(2,0)} p_0^{(2,0,0,0,0)} (v'_1)^2 + 2 (u'_{11})^2 (u'_{12})^2 p_1^{(0,1)} p_1^{(2,1)} p_0^{(2,0,0,0,0)} (v'_1)^2 + \\
& (u'_{11})^2 (u'_{52})^2 v'_5 (p_5^{(0,1)})^2 (p_1^{(1,0)})^2 p_0^{(2,0,0,0,1)} (v'_1)^2 + (u'_{11})^2 v'_5 u''_{52} p_5^{(0,1)} (p_1^{(1,0)})^2 p_0^{(2,0,0,0,1)} (v'_1)^2 + \\
& (u'_{11})^2 (u'_{52})^2 v'_5 p_5^{(0,2)} (p_1^{(1,0)})^2 p_0^{(2,0,0,0,1)} (v'_1)^2 + (u'_{12})^2 (u'_{51})^2 v'_5 (p_1^{(0,1)})^2 (p_5^{(1,0)})^2 p_0^{(2,0,0,0,1)} (v'_1)^2 + \\
& 2 u'_{12} u'_{52} v'_5 u''_{11} p_1^{(0,1)} p_5^{(0,1)} p_1^{(1,0)} p_0^{(2,0,0,0,1)} (v'_1)^2 + (u'_{12})^2 v'_5 u''_{51} (p_1^{(0,1)})^2 p_5^{(1,0)} p_0^{(2,0,0,0,1)} (v'_1)^2 + \\
& 2 u'_{11} u'_{51} v'_5 u''_{12} p_1^{(0,1)} p_1^{(1,0)} p_5^{(1,0)} p_0^{(2,0,0,0,1)} (v'_1)^2 + 4 u'_{11} u'_{12} u'_{51} u'_{52} v'_5 p_1^{(0,1)} p_5^{(0,1)} p_1^{(1,0)} p_5^{(1,0)} p_0^{(2,0,0,0,1)} (v'_1)^2 + \\
& 2 u'_{11} (u'_{12})^2 u'_{51} v'_5 p_1^{(0,2)} p_1^{(1,0)} p_5^{(1,0)} p_0^{(2,0,0,0,1)} (v'_1)^2 + 4 (u'_{11})^2 u'_{12} u'_{52} v'_5 p_5^{(0,1)} p_1^{(1,0)} p_1^{(1,1)} p_0^{(2,0,0,0,1)} (v'_1)^2 + \\
& 4 u'_{11} (u'_{12})^2 u'_{51} v'_5 p_1^{(0,1)} p_5^{(1,0)} p_1^{(1,1)} p_0^{(2,0,0,0,1)} (v'_1)^2 + 4 u'_{11} u'_{12} u'_{51} u'_{52} v'_5 p_1^{(0,1)} p_1^{(1,0)} p_5^{(1,1)} p_0^{(2,0,0,0,1)} (v'_1)^2 + \\
& 2 (u'_{11})^2 u'_{12} u'_{52} v'_5 p_1^{(0,1)} p_5^{(0,1)} p_1^{(2,0)} p_0^{(2,0,0,0,1)} (v'_1)^2 + (u'_{12})^2 (u'_{51})^2 v'_5 (p_1^{(0,1)})^2 p_5^{(2,0)} p_0^{(2,0,0,0,1)} (v'_1)^2 + \\
& (u'_{11})^2 (u'_{52})^2 (v'_5)^2 (p_5^{(0,1)})^2 (p_1^{(1,0)})^2 p_0^{(2,0,0,0,2)} (v'_1)^2 + (u'_{12})^2 (u'_{51})^2 (v'_5)^2 (p_1^{(0,1)})^2 (p_5^{(1,0)})^2 p_0^{(2,0,0,0,2)} (v'_1)^2 + \\
& 4 u'_{11} u'_{12} u'_{51} u'_{52} (v'_5)^2 p_1^{(0,1)} p_5^{(0,1)} p_1^{(1,0)} p_5^{(1,0)} p_0^{(2,0,0,0,2)} (v'_1)^2 + (u'_{11})^2 (u'_{42})^2 v''_4 (p_4^{(0,1)})^2 (p_1^{(1,0)})^2 p_0^{(2,0,0,1,0)} (v'_1)^2 + \\
& (u'_{11})^2 v'_4 u''_{42} p_4^{(0,1)} (p_1^{(1,0)})^2 p_0^{(2,0,0,1,0)} (v'_1)^2 + (u'_{11})^2 (u'_{42})^2 v'_4 p_4^{(0,2)} (p_1^{(1,0)})^2 p_0^{(2,0,0,1,0)} (v'_1)^2 + \\
& (u'_{12})^2 (u'_{41})^2 v''_4 (p_4^{(0,1)})^2 (p_1^{(1,0)})^2 p_0^{(2,0,0,1,0)} (v'_1)^2 + 2 u'_{12} u'_{42} v'_4 u''_{11} p_1^{(0,1)} p_4^{(0,1)} p_1^{(1,0)} p_0^{(2,0,0,1,0)} (v'_1)^2 + \\
& (u'_{12})^2 v'_4 u''_{41} (p_1^{(0,1)})^2 p_4^{(1,0)} p_0^{(2,0,0,1,0)} (v'_1)^2 + 2 u'_{11} u'_{41} v'_4 u''_{12} p_1^{(0,1)} p_1^{(1,0)} p_4^{(1,0)} p_0^{(2,0,0,1,0)} (v'_1)^2 + \\
& 4 u'_{11} u'_{12} u'_{41} u'_{42} v''_4 p_1^{(0,1)} p_4^{(0,1)} p_1^{(1,0)} p_4^{(1,0)} p_0^{(2,0,0,1,0)} (v'_1)^2 + 2 u'_{11} (u'_{12})^2 u'_{41} v'_4 p_1^{(0,2)} p_1^{(1,0)} p_4^{(1,0)} p_0^{(2,0,0,1,0)} (v'_1)^2 + \\
& 4 (u'_{11})^2 u'_{12} u'_{42} v'_4 p_4^{(0,1)} p_1^{(1,0)} p_1^{(1,1)} p_0^{(2,0,0,1,0)} (v'_1)^2 + 4 u'_{11} (u'_{12})^2 u'_{41} v'_4 p_1^{(0,1)} p_4^{(1,0)} p_1^{(1,1)} p_0^{(2,0,0,1,0)} (v'_1)^2 + \\
& 4 u'_{11} u'_{12} u'_{41} u'_{42} v'_4 p_1^{(0,1)} p_1^{(1,0)} p_1^{(1,1)} p_0^{(2,0,0,1,0)} (v'_1)^2 + 2 (u'_{11})^2 u'_{12} u'_{42} v'_4 p_1^{(0,1)} p_4^{(0,1)} p_1^{(2,0)} p_0^{(2,0,0,1,0)} (v'_1)^2 + \\
& (u'_{12})^2 (u'_{41})^2 v'_4 (p_1^{(0,1)})^2 p_4^{(2,0)} p_0^{(2,0,0,1,0)} (v'_1)^2 + 2 (u'_{11})^2 u'_{42} u'_{52} v'_4 v'_5 p_4^{(0,1)} p_5^{(0,1)} (p_1^{(1,0)})^2 p_0^{(2,0,0,1,1)} (v'_1)^2 + \\
& 4 u'_{11} u'_{12} u'_{41} u'_{52} v'_4 v'_5 p_1^{(0,1)} p_5^{(0,1)} p_1^{(1,0)} p_4^{(1,0)} p_0^{(2,0,0,1,1)} (v'_1)^2 + 4 u'_{11} u'_{12} u'_{42} u'_{51} v'_4 v'_5 p_1^{(0,1)} p_4^{(0,1)} p_1^{(1,0)} p_5^{(1,0)} p_0^{(2,0,0,1,1)} (v'_1)^2 + \\
& 2 (u'_{12})^2 u'_{41} u'_{51} v'_4 v'_5 (p_1^{(0,1)})^2 p_4^{(1,0)} p_5^{(1,0)} p_0^{(2,0,0,1,1)} (v'_1)^2 + (u'_{11})^2 (u'_{42})^2 (v'_4)^2 (p_4^{(0,1)})^2 (p_1^{(1,0)})^2 p_0^{(2,0,0,2,0)} (v'_1)^2 + \\
& (u'_{12})^2 (u'_{41})^2 (v'_4)^2 (p_1^{(0,1)})^2 (p_4^{(1,0)})^2 p_0^{(2,0,0,2,0)} (v'_1)^2 + 4 u'_{11} u'_{12} u'_{41} u'_{42} (v'_4)^2 p_1^{(0,1)} p_4^{(0,1)} p_1^{(1,0)} p_4^{(1,0)} p_0^{(2,0,0,2,0)} (v'_1)^2 + \\
& (u'_{11})^2 (u'_{32})^2 v''_3 (p_3^{(0,1)})^2 (p_1^{(1,0)})^2 p_0^{(2,0,1,0,0)} (v'_1)^2 + (u'_{11})^2 v'_3 u''_{32} p_3^{(0,1)} (p_1^{(1,0)})^2 p_0^{(2,0,1,0,0)} (v'_1)^2 + \\
& (u'_{11})^2 (u'_{32})^2 v'_3 p_3^{(0,2)} (p_1^{(1,0)})^2 p_0^{(2,0,1,0,0)} (v'_1)^2 + (u'_{12})^2 (u'_{31})^2 v''_3 (p_1^{(0,1)})^2 (p_3^{(1,0)})^2 p_0^{(2,0,1,0,0)} (v'_1)^2 + \\
& 2 u'_{12} u'_{32} v'_3 u''_{11} p_1^{(0,1)} p_3^{(0,1)} p_1^{(1,0)} p_0^{(2,0,1,0,0)} (v'_1)^2 + (u'_{12})^2 v'_3 u''_{31} (p_1^{(0,1)})^2 p_3^{(1,0)} p_0^{(2,0,1,0,0)} (v'_1)^2 + \\
& 2 u'_{11} u'_{31} v'_3 u''_{12} p_1^{(0,1)} p_1^{(1,0)} p_3^{(1,0)} p_0^{(2,0,1,0,0)} (v'_1)^2 + 4 u'_{11} u'_{12} u'_{31} u'_{32} v'_3 p_1^{(0,1)} p_3^{(0,1)} p_1^{(1,0)} p_3^{(1,0)} p_0^{(2,0,1,0,0)} (v'_1)^2 + \\
& 2 u'_{11} (u'_{12})^2 u'_{31} v'_3 p_1^{(0,2)} p_1^{(1,0)} p_3^{(1,0)} p_0^{(2,0,1,0,0)} (v'_1)^2 + 4 (u'_{11})^2 u'_{12} u'_{32} v'_3 p_3^{(0,1)} p_1^{(1,0)} p_1^{(1,1)} p_0^{(2,0,1,0,0)} (v'_1)^2 + \\
& 4 u'_{11} (u'_{12})^2 u'_{31} v'_3 p_1^{(0,1)} p_3^{(1,0)} p_1^{(1,1)} p_0^{(2,0,1,0,0)} (v'_1)^2 + 4 u'_{11} u'_{12} u'_{31} u'_{32} v'_3 p_1^{(0,1)} p_1^{(1,0)} p_3^{(1,1)} p_0^{(2,0,1,0,0)} (v'_1)^2 + \\
& 2 (u'_{11})^2 u'_{12} u'_{32} v'_3 p_1^{(0,1)} p_3^{(0,1)} p_1^{(2,0)} p_0^{(2,0,1,0,0)} (v'_1)^2 + (u'_{12})^2 (u'_{31})^2 v'_3 (p_1^{(0,1)})^2 p_3^{(2,0)} p_0^{(2,0,1,0,0)} (v'_1)^2 + \\
& 2 (u'_{11})^2 u'_{32} u'_{52} v'_3 v'_5 p_3^{(0,1)} p_5^{(0,1)} (p_1^{(1,0)})^2 p_0^{(2,0,1,0,1)} (v'_1)^2 + 4 u'_{11} u'_{12} u'_{31} u'_{52} v'_3 v'_5 p_1^{(0,1)} p_5^{(0,1)} p_1^{(1,0)} p_3^{(1,0)} p_0^{(2,0,1,0,1)} (v'_1)^2 +
\end{aligned}$$

$$\begin{aligned}
& 4 u'_{11} u'_{12} u'_{32} u'_{51} v_3 v_5 p_1^{(0,1)} p_3^{(0,1)} p_1^{(1,0)} p_5^{(1,0)} p_0^{(2,0,1,0,1)} (v_1')^2 + 2 (u'_{12})^2 u'_{31} u'_{51} v_3 v_5 (p_1^{(0,1)})^2 p_3^{(1,0)} p_5^{(1,0)} p_0^{(2,0,1,0,1)} (v_1')^2 + \\
& 2 (u'_{11})^2 u'_{32} u'_{42} v_3 v_4 p_3^{(0,1)} p_4^{(0,1)} (p_1^{(1,0)})^2 p_0^{(2,0,1,1,0)} (v_1')^2 + 4 u'_{11} u'_{12} u'_{31} u'_{42} v_3 v_4 p_1^{(0,1)} p_4^{(0,1)} p_1^{(1,0)} p_3^{(1,0)} p_0^{(2,0,1,1,0)} (v_1')^2 + \\
& 4 u'_{11} u'_{12} u'_{32} u'_{41} v_3 v_4 p_1^{(0,1)} p_3^{(0,1)} p_1^{(1,0)} p_4^{(1,0)} p_0^{(2,0,1,1,0)} (v_1')^2 + 2 (u'_{12})^2 u'_{31} u'_{41} v_3 v_4 (p_1^{(0,1)})^2 p_3^{(1,0)} p_4^{(1,0)} p_0^{(2,0,1,1,0)} (v_1')^2 + \\
& (u'_{11})^2 (u'_{32})^2 (v_3')^2 (p_3^{(0,1)})^2 (p_1^{(1,0)})^2 p_0^{(2,0,2,0,0)} (v_1')^2 + (u'_{12})^2 (u'_{31})^2 (v_3')^2 (p_1^{(0,1)})^2 (p_3^{(1,0)})^2 p_0^{(2,0,2,0,0)} (v_1')^2 + \\
& 4 u'_{11} u'_{12} u'_{31} u'_{32} (v_3')^2 p_1^{(0,1)} p_3^{(0,1)} p_1^{(1,0)} p_3^{(1,0)} p_0^{(2,0,2,0,0)} (v_1')^2 + (u'_{11})^2 (u'_{22})^2 v_2'' (p_2^{(0,1)})^2 (p_1^{(1,0)})^2 p_0^{(2,1,0,0,0)} (v_1')^2 + \\
& (u'_{11})^2 v_2'' u'_{22} p_2^{(0,1)} (p_1^{(1,0)})^2 p_0^{(2,1,0,0,0)} (v_1')^2 + (u'_{11})^2 (u'_{22})^2 v_2'' p_2^{(0,2)} (p_1^{(1,0)})^2 p_0^{(2,1,0,0,0)} (v_1')^2 + \\
& (u'_{12})^2 (u'_{21})^2 v_2'' (p_1^{(0,1)})^2 (p_2^{(1,0)})^2 p_0^{(2,1,0,0,0)} (v_1')^2 + 2 u'_{12} u'_{22} v_2'' u'_{11} p_1^{(0,1)} p_2^{(0,1)} p_1^{(1,0)} p_0^{(2,1,0,0,0)} (v_1')^2 + \\
& (u'_{12})^2 v_2'' u'_{21} (p_1^{(0,1)})^2 p_2^{(1,0)} p_0^{(2,1,0,0,0)} (v_1')^2 + 2 u'_{11} u'_{21} v_2'' u'_{12} p_1^{(0,1)} p_2^{(1,0)} p_1^{(1,0)} p_0^{(2,1,0,0,0)} (v_1')^2 + \\
& 4 u'_{11} u'_{12} u'_{21} u'_{22} v_2'' p_2^{(0,1)} p_2^{(0,1)} p_1^{(1,0)} p_2^{(1,0)} p_0^{(2,1,0,0,0)} (v_1')^2 + 2 u'_{11} (u'_{12})^2 u'_{21} v_2'' p_1^{(0,2)} p_1^{(1,0)} p_2^{(1,0)} p_0^{(2,1,0,0,0)} (v_1')^2 + \\
& 4 (u'_{11})^2 u'_{12} u'_{22} v_2'' p_2^{(0,1)} p_1^{(1,0)} p_1^{(1,1)} p_0^{(2,1,0,0,0)} (v_1')^2 + 4 u'_{11} (u'_{12})^2 u'_{21} v_2'' p_1^{(0,1)} p_2^{(1,0)} p_1^{(1,1)} p_0^{(2,1,0,0,0)} (v_1')^2 + \\
& 4 u'_{11} u'_{12} u'_{21} u'_{22} v_2'' p_1^{(0,1)} p_1^{(1,0)} p_2^{(1,1)} p_0^{(2,1,0,0,0)} (v_1')^2 + 2 (u'_{11})^2 u'_{12} u'_{22} v_2'' p_1^{(0,1)} p_2^{(0,1)} p_1^{(2,0)} p_0^{(2,1,0,0,0)} (v_1')^2 + \\
& (u'_{12})^2 (u'_{21})^2 v_2'' (p_1^{(0,1)})^2 p_2^{(2,0)} p_0^{(2,1,0,0,0)} (v_1')^2 + 2 (u'_{11})^2 u'_{22} u'_{52} v_2'' v_5 p_2^{(0,1)} p_5^{(0,1)} (p_1^{(1,0)})^2 p_0^{(2,1,0,0,1)} (v_1')^2 + \\
& 4 u'_{11} u'_{12} u'_{21} u'_{52} v_2'' v_5 p_1^{(0,1)} p_5^{(0,1)} p_1^{(1,0)} p_2^{(1,0)} p_0^{(2,1,0,0,1)} (v_1')^2 + 4 u'_{11} u'_{12} u'_{22} u'_{51} v_2'' v_5 p_1^{(0,1)} p_2^{(0,1)} p_1^{(1,0)} p_5^{(1,0)} p_0^{(2,1,0,0,1)} (v_1')^2 + \\
& 2 (u'_{12})^2 u'_{21} u'_{51} v_2'' v_5 (p_1^{(0,1)})^2 p_2^{(1,0)} p_5^{(1,0)} p_0^{(2,1,0,0,1)} (v_1')^2 + 2 (u'_{11})^2 u'_{22} u'_{42} v_2'' v_4 p_2^{(0,1)} p_4^{(0,1)} (p_1^{(1,0)})^2 p_0^{(2,1,0,1,0)} (v_1')^2 + \\
& 4 u'_{11} u'_{12} u'_{21} u'_{42} v_2'' v_4 p_1^{(0,1)} p_4^{(0,1)} p_1^{(1,0)} p_2^{(1,0)} p_0^{(2,1,0,1,0)} (v_1')^2 + 4 u'_{11} u'_{12} u'_{22} u'_{41} v_2'' v_4 p_1^{(0,1)} p_2^{(0,1)} p_1^{(1,0)} p_4^{(1,0)} p_0^{(2,1,0,1,0)} (v_1')^2 + \\
& 2 (u'_{12})^2 u'_{21} u'_{41} v_2'' v_4 (p_1^{(0,1)})^2 p_2^{(1,0)} p_4^{(1,0)} p_0^{(2,1,0,1,0)} (v_1')^2 + 2 (u'_{11})^2 u'_{22} u'_{32} v_2'' v_3 p_2^{(0,1)} p_3^{(0,1)} (p_1^{(1,0)})^2 p_0^{(2,1,1,0,0)} (v_1')^2 + \\
& 4 u'_{11} u'_{12} u'_{21} u'_{32} v_2'' v_3 p_1^{(0,1)} p_3^{(0,1)} p_1^{(1,0)} p_2^{(1,0)} p_0^{(2,1,1,0,0)} (v_1')^2 + 4 u'_{11} u'_{12} u'_{22} u'_{31} v_2'' v_3 p_1^{(0,1)} p_2^{(0,1)} p_1^{(1,0)} p_3^{(1,0)} p_0^{(2,1,1,0,0)} (v_1')^2 + \\
& 2 (u'_{12})^2 u'_{21} u'_{31} v_2'' v_3 (p_1^{(0,1)})^2 p_2^{(1,0)} p_3^{(1,0)} p_0^{(2,1,1,0,0)} (v_1')^2 + (u'_{11})^2 (u'_{22})^2 (v_2'')^2 (p_2^{(0,1)})^2 (p_1^{(1,0)})^2 p_0^{(2,2,0,0,0)} (v_1')^2 + \\
& (u'_{12})^2 (u'_{21})^2 (v_2'')^2 (p_1^{(0,1)})^2 (p_2^{(1,0)})^2 p_0^{(2,2,0,0,0)} (v_1')^2 + 4 u'_{11} u'_{12} u'_{21} u'_{22} (v_2'')^2 p_1^{(0,1)} p_2^{(0,1)} p_1^{(1,0)} p_2^{(1,0)} p_0^{(2,2,0,0,0)} (v_1')^2 + \\
& 6 (u'_{11})^2 (u'_{12})^2 v_1'' (p_1^{(0,1)})^2 (p_1^{(1,0)})^2 p_0^{(3,0,0,0,0)} (v_1')^2 + u'_{11} u'_{12} p_1^{(1,1)} p_0^{(1,0,0,0,0)} v_1' + (u'_{12})^2 u'_{11} p_1^{(1,2)} p_0^{(1,0,0,0,0)} v_1' + \\
& (u'_{11})^2 u'_{12} p_1^{(2,1)} p_0^{(1,0,0,0,0)} v_1' + (u'_{11})^2 (u'_{12})^2 p_1^{(2,2)} p_0^{(1,0,0,0,0)} v_1' + (u'_{51})^2 u'_{12} v_5'' p_1^{(0,1)} (p_5^{(1,0)})^2 p_0^{(1,0,0,0,1)} v_1' + \\
& 2 u'_{12} (u'_{51})^2 u'_{52} v_5'' p_1^{(0,1)} p_5^{(0,1)} (p_5^{(1,0)})^2 p_0^{(1,0,0,0,1)} v_1' + (u'_{12})^2 (u'_{51})^2 v_5'' p_1^{(0,2)} (p_5^{(1,0)})^2 p_0^{(1,0,0,0,1)} v_1' + \\
& (u'_{52})^2 u'_{11} v_5'' (p_5^{(0,1)})^2 p_1^{(1,0)} p_0^{(1,0,0,0,1)} v_1' + v_5'' u'_{11} u'_{52} p_5^{(0,1)} p_1^{(1,0)} p_0^{(1,0,0,0,1)} v_1' + (u'_{52})^2 v_5'' u'_{11} p_5^{(0,2)} p_1^{(1,0)} p_0^{(1,0,0,0,1)} v_1' + \\
& v_5'' u'_{12} u'_{51} p_1^{(0,1)} p_5^{(1,0)} p_0^{(1,0,0,0,1)} v_1' + 2 u'_{12} u'_{52} u'_{51} v_5'' p_1^{(0,1)} p_5^{(0,1)} p_5^{(1,0)} p_0^{(1,0,0,0,1)} v_1' + (u'_{12})^2 v_5'' u'_{51} p_1^{(0,2)} p_5^{(1,0)} p_0^{(1,0,0,0,1)} v_1' + \\
& 2 u'_{11} u'_{51} (u'_{52})^2 v_5'' (p_5^{(0,1)})^2 p_1^{(1,0)} p_1^{(1,0)} p_0^{(1,0,0,0,1)} v_1' + 2 u'_{11} u'_{51} u'_{52} v_5'' p_5^{(0,1)} p_1^{(1,0)} p_5^{(1,0)} p_0^{(1,0,0,0,1)} v_1' + \\
& 2 u'_{11} u'_{51} (u'_{52})^2 v_5'' p_5^{(0,2)} p_1^{(1,0)} p_5^{(1,0)} p_0^{(1,0,0,0,1)} v_1' + 2 u'_{12} u'_{52} v_5'' u'_{11} p_5^{(0,1)} p_1^{(1,1)} p_0^{(1,0,0,0,1)} v_1' + 2 u'_{11} u'_{51} v_5'' u'_{12} p_5^{(1,0)} p_1^{(1,1)} p_0^{(1,0,0,0,1)} v_1' + \\
& 4 u'_{11} u'_{12} u'_{51} u'_{52} v_5'' p_5^{(0,1)} p_5^{(1,0)} p_1^{(1,0)} p_0^{(1,0,0,0,1)} v_1' + 2 u'_{12} u'_{52} v_5'' u'_{51} p_1^{(0,1)} p_5^{(1,1)} p_0^{(1,0,0,0,1)} v_1' + 2 u'_{11} u'_{51} v_5'' u'_{52} p_1^{(1,0)} p_5^{(1,1)} p_0^{(1,0,0,0,1)} v_1' + \\
& 4 u'_{11} u'_{51} (u'_{52})^2 v_5'' p_5^{(0,1)} p_1^{(1,0)} p_5^{(1,1)} p_0^{(1,0,0,0,1)} v_1' + 4 u'_{12} (u'_{51})^2 u'_{52} v_5'' p_1^{(0,1)} p_5^{(1,0)} p_5^{(1,1)} p_0^{(1,0,0,0,1)} v_1' + \\
& 4 u'_{11} u'_{12} u'_{51} u'_{52} v_5'' p_1^{(1,1)} p_5^{(1,1)} p_0^{(1,0,0,0,1)} v_1' + 2 u'_{11} (u'_{12})^2 u'_{51} v_5'' p_5^{(1,0)} p_1^{(1,2)} p_0^{(1,0,0,0,1)} v_1' + 2 u'_{11} u'_{51} (u'_{52})^2 v_5'' p_1^{(1,0)} p_5^{(1,2)} p_0^{(1,0,0,0,1)} v_1' + \\
& (u'_{11})^2 (u'_{52})^2 v_5'' (p_5^{(0,1)})^2 p_1^{(2,0)} p_0^{(1,0,0,0,1)} v_1' + (u'_{11})^2 v_5'' u'_{52} p_5^{(0,1)} p_1^{(2,0)} p_0^{(1,0,0,0,1)} v_1' + (u'_{11})^2 (u'_{52})^2 v_5'' p_1^{(2,0)} p_0^{(1,0,0,0,1)} v_1' + \\
& (u'_{51})^2 v_5'' u'_{12} p_1^{(0,1)} p_5^{(2,0)} p_0^{(1,0,0,0,1)} v_1' + 2 u'_{12} (u'_{51})^2 u'_{52} v_5'' p_1^{(0,1)} p_5^{(0,1)} p_5^{(2,0)} p_0^{(1,0,0,0,1)} v_1' + (u'_{12})^2 (u'_{51})^2 v_5'' p_1^{(0,2)} p_5^{(2,0)} p_0^{(1,0,0,0,1)} v_1' + \\
& 2 (u'_{11})^2 u'_{12} u'_{52} v_5'' p_5^{(0,1)} p_1^{(2,1)} p_0^{(1,0,0,0,1)} v_1' + 2 u'_{12} (u'_{51})^2 u'_{52} v_5'' p_1^{(0,1)} p_5^{(2,1)} p_0^{(1,0,0,0,1)} v_1' + (u'_{51})^2 (v_5'')^2 u'_{12} p_1^{(0,1)} (p_5^{(1,0)})^2 p_0^{(1,0,0,0,2)} v_1' + \\
& 6 u'_{12} (u'_{51})^2 u'_{52} v_5'' v_5'' p_1^{(0,1)} p_5^{(0,1)} (p_5^{(1,0)})^2 p_0^{(1,0,0,0,2)} v_1' + (u'_{12})^2 (u'_{51})^2 (v_5'')^2 p_1^{(0,2)} (p_5^{(1,0)})^2 p_0^{(1,0,0,0,2)} v_1' + \\
& (u'_{52})^2 (v_5'')^2 u'_{11} (p_5^{(0,1)})^2 p_1^{(1,0)} p_0^{(1,0,0,0,2)} v_1' + 2 u'_{12} u'_{52} (v_5'')^2 u'_{51} p_1^{(0,1)} p_5^{(0,1)} p_5^{(1,0)} p_0^{(1,0,0,0,2)} v_1' + \\
& 6 u'_{11} u'_{51} (u'_{52})^2 v_5'' v_5'' (p_5^{(0,1)})^2 p_1^{(1,0)} p_5^{(1,0)} p_0^{(1,0,0,0,2)} v_1' + 2 u'_{11} u'_{51} (v_5'')^2 u'_{52} p_5^{(0,1)} p_1^{(1,0)} p_5^{(1,0)} p_0^{(1,0,0,0,2)} v_1' + \\
& 2 u'_{11} u'_{51} (u'_{52})^2 (v_5'')^2 p_5^{(0,2)} p_1^{(1,0)} p_5^{(1,0)} p_0^{(1,0,0,0,2)} v_1' + 4 u'_{11} u'_{12} u'_{51} u'_{52} (v_5'')^2 p_5^{(0,1)} p_5^{(1,0)} p_1^{(1,1)} p_0^{(1,0,0,0,2)} v_1' + \\
& 4 u'_{11} u'_{51} (u'_{52})^2 (v_5'')^2 p_5^{(0,1)} p_1^{(1,0)} p_5^{(1,1)} p_0^{(1,0,0,0,2)} v_1' + 4 u'_{12} (u'_{51})^2 u'_{52} (v_5'')^2 p_1^{(0,1)} p_5^{(1,0)} p_1^{(1,1)} p_0^{(1,0,0,0,2)} v_1' + \\
& (u'_{11})^2 (u'_{52})^2 (v_5'')^2 (p_5^{(0,1)})^2 p_1^{(2,0)} p_0^{(1,0,0,0,2)} v_1' + 2 u'_{12} (u'_{51})^2 u'_{52} (v_5'')^2 p_1^{(0,1)} p_5^{(0,1)} p_5^{(2,0)} p_0^{(1,0,0,0,2)} v_1' + \\
& 2 u'_{12} (u'_{51})^2 u'_{52} (v_5'')^3 p_1^{(0,1)} p_5^{(0,1)} (p_5^{(1,0)})^2 p_0^{(1,0,0,0,3)} v_1' + 2 u'_{11} u'_{51} (u'_{52})^2 (v_5'')^3 (p_5^{(0,1)})^2 p_1^{(1,0)} p_5^{(1,0)} p_0^{(1,0,0,0,3)} v_1' + \\
& (u'_{41})^2 u'_{12} v_4'' p_1^{(0,1)} (p_4^{(1,0)})^2 p_0^{(1,0,0,1,0)} v_1' + 2 u'_{12} (u'_{41})^2 u'_{42} v_4'' p_1^{(0,1)} p_4^{(0,1)} (p_4^{(1,0)})^2 p_0^{(1,0,0,1,0)} v_1' + \\
& (u'_{12})^2 (u'_{41})^2 v_4'' p_1^{(0,2)} (p_4^{(1,0)})^2 p_0^{(1,0,0,1,0)} v_1' + (u'_{42})^2 u'_{11} v_4'' (p_4^{(0,1)})^2 p_1^{(1,0)} p_0^{(1,0,0,1,0)} v_1' + v_4'' u'_{11} u'_{42} p_4^{(0,1)} p_1^{(1,0)} p_0^{(1,0,0,1,0)} v_1' + \\
& (u'_{42})^2 v_4'' u'_{11} p_4^{(0,2)} p_1^{(1,0)} p_0^{(1,0,0,1,0)} v_1' + v_4'' u'_{12} u'_{41} p_1^{(0,1)} p_4^{(1,0)} p_0^{(1,0,0,1,0)} v_1' + 2 u'_{12} u'_{42} u'_{41} v_4'' p_1^{(0,1)} p_4^{(0,1)} p_4^{(1,0)} p_0^{(1,0,0,1,0)} v_1' + \\
& (u'_{12})^2 v_4'' u'_{41} p_1^{(0,2)} p_4^{(1,0)} p_0^{(1,0,0,1,0)} v_1' + 2 u'_{11} u'_{41} (u'_{42})^2 v_4'' (p_4^{(0,1)})^2 p_1^{(1,0)} p_4^{(1,0)} p_0^{(1,0,0,1,0)} v_1' + \\
& 2 u'_{11} u'_{41} u'_{42} v_4'' p_4^{(0,1)} p_4^{(1,0)} p_0^{(1,0,0,1,0)} v_1' + 2 u'_{11} u'_{41} (u'_{42})^2 v_4'' p_4^{(0,2)} p_1^{(1,0)} p_4^{(1,0)} p_0^{(1,0,0,1,0)} v_1' +
\end{aligned}$$

$$\begin{aligned}
& 2 u'_{12} u'_{42} v'_4 u''_{11} p_4^{(0,1)} p_1^{(1,1)} p_0^{(1,0,0,1,0)} v'_1 + 2 u'_{11} u'_{41} v'_4 u''_{12} p_4^{(1,0)} p_1^{(1,1)} p_0^{(1,0,0,1,0)} v'_1 + 4 u'_{11} u'_{12} u'_{41} u'_{42} v''_4 p_4^{(0,1)} p_4^{(1,0)} p_1^{(1,1)} p_0^{(1,0,0,1,0)} v'_1 + \\
& 2 u'_{12} u'_{42} v'_4 u'_{41} p_1^{(0,1)} p_4^{(1,1)} p_0^{(1,0,0,1,0)} v'_1 + 2 u'_{11} u'_{41} v'_4 u'_{42} p_1^{(1,0)} p_4^{(1,1)} p_0^{(1,0,0,1,0)} v'_1 + 4 u'_{11} u'_{41} (u'_{42})^2 v'_4 p_4^{(0,1)} p_1^{(1,0)} p_0^{(1,0,0,1,0)} v'_1 + \\
& 4 u'_{12} (u'_{41})^2 u'_{42} v'_4 p_1^{(0,1)} p_4^{(1,0)} p_0^{(1,0,0,1,0)} v'_1 + 4 u'_{11} u'_{12} u'_{41} u'_{42} v'_4 p_1^{(1,1)} p_4^{(1,1)} p_0^{(1,0,0,1,0)} v'_1 + \\
& 2 u'_{11} (u'_{12})^2 u'_{41} v'_4 p_4^{(1,0)} p_1^{(1,2)} p_0^{(1,0,0,1,0)} v'_1 + 2 u'_{11} u'_{41} (u'_{42})^2 v'_4 p_1^{(1,0)} p_4^{(1,2)} p_0^{(1,0,0,1,0)} v'_1 + (u'_{11})^2 (u'_{42})^2 v''_4 (p_4^{(0,1)})^2 p_1^{(2,0)} p_0^{(1,0,0,1,0)} v'_1 + \\
& (u'_{11})^2 v'_4 u'_{42} p_4^{(0,1)} p_1^{(2,0)} p_0^{(1,0,0,1,0)} v'_1 + (u'_{11})^2 (u'_{42})^2 v'_4 p_4^{(0,2)} p_1^{(2,0)} p_0^{(1,0,0,1,0)} v'_1 + (u'_{41})^2 v'_4 u''_{12} p_1^{(0,1)} p_4^{(2,0)} p_0^{(1,0,0,1,0)} v'_1 + \\
& 2 u'_{12} (u'_{41})^2 u'_{42} v'_4 p_1^{(0,1)} p_4^{(2,0)} p_0^{(1,0,0,1,0)} v'_1 + (u'_{12})^2 (u'_{41})^2 v'_4 p_1^{(0,2)} p_4^{(2,0)} p_0^{(1,0,0,1,0)} v'_1 + 2 (u'_{11})^2 u'_{12} u'_{42} v'_4 p_4^{(0,1)} p_1^{(2,1)} p_0^{(1,0,0,1,0)} v'_1 + \\
& 2 u'_{12} (u'_{41})^2 u'_{42} v'_4 p_1^{(0,1)} p_4^{(2,1)} p_0^{(1,0,0,1,0)} v'_1 + 2 u'_{12} (u'_{41})^2 u'_{52} v'_5 v''_4 p_1^{(0,1)} p_5^{(0,1)} (p_4^{(1,0)})^2 p_0^{(1,0,0,1,1)} v'_1 + \\
& 2 u'_{12} u'_{42} (u'_{51})^2 v'_4 v'_5 p_1^{(0,1)} p_4^{(0,1)} (p_5^{(1,0)})^2 p_0^{(1,0,0,1,1)} v'_1 + 2 u'_{42} u'_{52} v'_4 v'_5 u''_{11} p_4^{(0,1)} p_5^{(0,1)} p_1^{(1,0)} p_0^{(1,0,0,1,1)} v'_1 + \\
& 2 u'_{12} u'_{52} v'_4 v'_5 u'_{41} p_1^{(0,1)} p_5^{(0,1)} p_4^{(1,0)} p_0^{(1,0,0,1,1)} v'_1 + 2 u'_{11} u'_{41} (u'_{52})^2 v'_4 v'_5 (p_5^{(0,1)})^2 p_1^{(1,0)} p_4^{(1,0)} p_0^{(1,0,0,1,1)} v'_1 + \\
& 2 u'_{11} u'_{41} v'_4 v'_5 u'_{52} p_5^{(0,1)} p_1^{(1,0)} p_4^{(1,0)} p_0^{(1,0,0,1,1)} v'_1 + 4 u'_{11} u'_{41} u'_{42} u'_{52} v'_5 v''_4 p_4^{(0,1)} p_5^{(0,1)} p_1^{(1,0)} p_4^{(1,0)} p_0^{(1,0,0,1,1)} v'_1 + \\
& 2 u'_{11} u'_{41} (u'_{52})^2 v'_4 v'_5 p_5^{(0,2)} p_1^{(1,0)} p_4^{(1,0)} p_0^{(1,0,0,1,1)} v'_1 + 2 u'_{12} u'_{42} v'_4 v'_5 u'_{51} p_1^{(0,1)} p_4^{(0,1)} p_5^{(1,0)} p_0^{(1,0,0,1,1)} v'_1 + \\
& 2 u'_{11} (u'_{42})^2 u'_{51} v'_5 v'_4 (p_4^{(0,1)})^2 p_1^{(1,0)} p_5^{(1,0)} p_0^{(1,0,0,1,1)} v'_1 + 2 u'_{11} u'_{51} v'_4 v'_5 u'_{42} p_4^{(0,1)} p_1^{(1,0)} p_5^{(1,0)} p_0^{(1,0,0,1,1)} v'_1 + \\
& 4 u'_{11} u'_{42} u'_{51} u'_{52} v'_4 v'_5 p_4^{(0,1)} p_5^{(0,1)} p_1^{(1,0)} p_5^{(1,0)} p_0^{(1,0,0,1,1)} v'_1 + 2 u'_{11} (u'_{42})^2 u'_{51} v'_4 v'_5 p_4^{(0,2)} p_1^{(1,0)} p_5^{(1,0)} p_0^{(1,0,0,1,1)} v'_1 + \\
& 2 u'_{41} u'_{51} v'_4 v'_5 u'_{12} p_1^{(0,1)} p_4^{(1,0)} p_5^{(1,0)} p_0^{(1,0,0,1,1)} v'_1 + 4 u'_{12} u'_{41} u'_{42} u'_{51} v'_5 v''_4 p_1^{(0,1)} p_4^{(0,1)} p_4^{(1,0)} p_5^{(1,0)} p_0^{(1,0,0,1,1)} v'_1 + \\
& 4 u'_{12} u'_{41} u'_{51} u'_{52} v'_4 v'_5 p_1^{(0,1)} p_5^{(0,1)} p_4^{(1,0)} p_5^{(1,0)} p_0^{(1,0,0,1,1)} v'_1 + 2 (u'_{12})^2 u'_{41} u'_{51} v'_4 v'_5 p_1^{(0,2)} p_4^{(1,0)} p_5^{(1,0)} p_0^{(1,0,0,1,1)} v'_1 + \\
& 4 u'_{11} u'_{12} u'_{41} u'_{52} v'_4 v'_5 p_5^{(0,1)} p_4^{(1,0)} p_1^{(1,1)} p_0^{(1,0,0,1,1)} v'_1 + 4 u'_{11} u'_{12} u'_{42} u'_{51} v'_4 v'_5 p_4^{(0,1)} p_5^{(1,0)} p_1^{(1,1)} p_0^{(1,0,0,1,1)} v'_1 + \\
& 4 u'_{11} u'_{41} u'_{42} u'_{52} v'_4 v'_5 p_5^{(0,1)} p_1^{(1,0)} p_4^{(1,1)} p_0^{(1,0,0,1,1)} v'_1 + 4 u'_{12} u'_{41} u'_{42} u'_{51} v'_4 v'_5 p_1^{(0,1)} p_5^{(1,0)} p_4^{(1,1)} p_0^{(1,0,0,1,1)} v'_1 + \\
& 4 u'_{11} u'_{42} u'_{51} u'_{52} v'_4 v'_5 p_4^{(0,1)} p_1^{(1,0)} p_5^{(1,1)} p_0^{(1,0,0,1,1)} v'_1 + 4 u'_{12} u'_{41} u'_{51} u'_{52} v'_4 v'_5 p_1^{(0,1)} p_4^{(1,0)} p_5^{(1,1)} p_0^{(1,0,0,1,1)} v'_1 + \\
& 2 (u'_{11})^2 u'_{42} u'_{52} v'_4 v'_5 p_4^{(0,1)} p_5^{(0,1)} p_1^{(2,0)} p_0^{(1,0,0,1,1)} v'_1 + 2 u'_{12} (u'_{41})^2 u'_{52} v'_4 v'_5 p_1^{(0,1)} p_5^{(0,1)} p_4^{(2,0)} p_0^{(1,0,0,1,1)} v'_1 + \\
& 2 u'_{12} u'_{42} (u'_{51})^2 v'_4 v'_5 p_1^{(0,1)} p_4^{(0,1)} p_5^{(2,0)} p_0^{(1,0,0,1,1)} v'_1 + 2 u'_{12} u'_{42} (u'_{51})^2 v'_4 (v'_5)^2 p_1^{(0,1)} p_4^{(0,1)} (p_5^{(1,0)})^2 p_0^{(1,0,0,1,2)} v'_1 + \\
& 2 u'_{11} u'_{41} (u'_{52})^2 v'_4 (v'_5)^2 (p_5^{(0,1)})^2 p_1^{(1,0)} p_4^{(1,0)} p_0^{(1,0,0,1,2)} v'_1 + 4 u'_{11} u'_{42} u'_{51} u'_{52} v'_4 (v'_5)^2 p_4^{(0,1)} p_5^{(0,1)} p_1^{(1,0)} p_5^{(1,0)} p_0^{(1,0,0,1,2)} v'_1 + \\
& 4 u'_{12} u'_{41} u'_{51} u'_{52} v'_4 (v'_5)^2 p_1^{(0,1)} p_5^{(0,1)} p_4^{(1,0)} p_5^{(1,0)} p_0^{(1,0,0,1,2)} v'_1 + (u'_{41})^2 (v'_4)^2 u'_{12} p_1^{(0,1)} (p_4^{(1,0)})^2 p_0^{(1,0,0,2,0)} v'_1 + \\
& 6 u'_{12} (u'_{41})^2 u'_{42} v'_4 v''_4 p_1^{(0,1)} p_4^{(0,1)} (p_4^{(1,0)})^2 p_0^{(1,0,0,2,0)} v'_1 + (u'_{12})^2 (u'_{41})^2 (v'_4)^2 p_1^{(0,2)} (p_4^{(1,0)})^2 p_0^{(1,0,0,2,0)} v'_1 + \\
& (u'_{42})^2 (v'_4)^2 u'_{11} (p_4^{(0,1)})^2 p_1^{(1,0)} p_0^{(1,0,0,2,0)} v'_1 + 2 u'_{12} u'_{42} (v'_4)^2 u'_{41} p_1^{(0,1)} p_4^{(0,1)} p_4^{(1,0)} p_0^{(1,0,0,2,0)} v'_1 + \\
& 6 u'_{11} u'_{41} (u'_{42})^2 v'_4 v''_4 (p_4^{(0,1)})^2 p_1^{(1,0)} p_4^{(1,0)} p_0^{(1,0,0,2,0)} v'_1 + 2 u'_{11} u'_{41} (v'_4)^2 u'_{42} p_4^{(0,1)} p_1^{(1,0)} p_4^{(1,0)} p_0^{(1,0,0,2,0)} v'_1 + \\
& 2 u'_{11} u'_{41} (u'_{42})^2 (v'_4)^2 p_4^{(0,2)} p_1^{(1,0)} p_4^{(1,0)} p_0^{(1,0,0,2,0)} v'_1 + 4 u'_{11} u'_{12} u'_{41} u'_{42} (v'_4)^2 p_4^{(0,1)} p_4^{(1,0)} p_1^{(1,1)} p_0^{(1,0,0,2,0)} v'_1 + \\
& 4 u'_{11} u'_{41} (u'_{42})^2 (v'_4)^2 p_4^{(0,1)} p_1^{(1,0)} p_4^{(1,1)} p_0^{(1,0,0,2,0)} v'_1 + 4 u'_{12} (u'_{41})^2 u'_{42} (v'_4)^2 p_1^{(0,1)} p_4^{(1,0)} p_4^{(1,1)} p_0^{(1,0,0,2,0)} v'_1 + \\
& (u'_{11})^2 (u'_{42})^2 (v'_4)^2 (p_4^{(0,1)})^2 p_1^{(2,0)} p_0^{(1,0,0,2,0)} v'_1 + 2 u'_{12} (u'_{41})^2 u'_{42} (v'_4)^2 p_1^{(0,1)} p_4^{(0,1)} p_4^{(2,0)} p_0^{(1,0,0,2,0)} v'_1 + \\
& 2 u'_{12} (u'_{41})^2 u'_{52} (v'_4)^2 v'_5 p_1^{(0,1)} p_5^{(0,1)} (p_4^{(1,0)})^2 p_0^{(1,0,0,2,1)} v'_1 + 4 u'_{11} u'_{41} u'_{42} u'_{52} (v'_4)^2 v'_5 p_4^{(0,1)} p_5^{(0,1)} p_1^{(1,0)} p_4^{(1,0)} p_0^{(1,0,0,2,1)} v'_1 + \\
& 2 u'_{11} (u'_{42})^2 u'_{51} (v'_4)^2 v'_5 (p_4^{(0,1)})^2 p_1^{(1,0)} p_5^{(1,0)} p_0^{(1,0,0,2,1)} v'_1 + 4 u'_{12} u'_{41} u'_{42} u'_{51} (v'_4)^2 v'_5 p_1^{(0,1)} p_4^{(0,1)} p_4^{(1,0)} p_5^{(1,0)} p_0^{(1,0,0,2,1)} v'_1 + \\
& 2 u'_{12} (u'_{41})^2 u'_{42} (v'_4)^3 p_1^{(0,1)} p_4^{(0,1)} (p_4^{(1,0)})^2 p_0^{(1,0,0,3,0)} v'_1 + 2 u'_{11} u'_{41} (u'_{42})^2 (v'_4)^3 (p_4^{(0,1)})^2 p_1^{(1,0)} p_4^{(1,0)} p_0^{(1,0,0,3,0)} v'_1 + \\
& (u'_{31})^2 u'_{12} v'_3 p_1^{(0,1)} (p_3^{(1,0)})^2 p_0^{(1,0,1,0,0)} v'_1 + 2 u'_{12} (u'_{31})^2 u'_{32} v'_3 p_1^{(0,1)} p_3^{(0,1)} (p_3^{(1,0)})^2 p_0^{(1,0,1,0,0)} v'_1 + \\
& (u'_{12})^2 (u'_{31})^2 v'_3 p_1^{(0,2)} (p_3^{(1,0)})^2 p_0^{(1,0,1,0,0)} v'_1 + (u'_{32})^2 u'_{11} v'_3 (p_3^{(0,1)})^2 p_1^{(1,0)} p_0^{(1,0,1,0,0)} v'_1 + v'_3 u'_{11} u'_{32} p_3^{(0,1)} p_1^{(1,0)} p_0^{(1,0,1,0,0)} v'_1 + \\
& (u'_{32})^2 v'_3 u'_{11} p_3^{(0,2)} p_1^{(1,0)} p_0^{(1,0,1,0,0)} v'_1 + v'_3 u'_{12} u'_{31} p_1^{(0,1)} p_3^{(1,0)} p_0^{(1,0,1,0,0)} v'_1 + 2 u'_{12} u'_{32} u'_{31} v'_3 p_1^{(0,1)} p_3^{(0,1)} p_3^{(1,0)} p_0^{(1,0,1,0,0)} v'_1 + \\
& (u'_{12})^2 v'_3 u'_{31} p_1^{(0,2)} p_3^{(1,0)} p_0^{(1,0,1,0,0)} v'_1 + 2 u'_{11} u'_{31} (u'_{32})^2 v'_3 (p_3^{(0,1)})^2 p_1^{(1,0)} p_3^{(1,0)} p_0^{(1,0,1,0,0)} v'_1 + \\
& 2 u'_{11} u'_{31} u'_{32} v'_3 p_3^{(0,1)} p_1^{(1,0)} p_3^{(1,0)} p_0^{(1,0,1,0,0)} v'_1 + 2 u'_{11} u'_{31} (u'_{32})^2 v'_3 p_3^{(0,2)} p_1^{(1,0)} p_3^{(1,0)} p_0^{(1,0,1,0,0)} v'_1 + \\
& 2 u'_{12} u'_{32} v'_3 u'_{11} p_3^{(0,1)} p_1^{(1,1)} p_0^{(1,0,1,0,0)} v'_1 + 2 u'_{11} u'_{31} v'_3 u'_{12} p_3^{(1,0)} p_1^{(1,1)} p_0^{(1,0,1,0,0)} v'_1 + 4 u'_{11} u'_{12} u'_{31} u'_{32} v'_3 p_3^{(0,1)} p_3^{(1,0)} p_1^{(1,1)} p_0^{(1,0,1,0,0)} v'_1 + \\
& 2 u'_{12} u'_{32} v'_3 u'_{31} p_1^{(0,1)} p_3^{(1,1)} p_0^{(1,0,1,0,0)} v'_1 + 2 u'_{11} u'_{31} v'_3 u'_{32} p_1^{(1,0)} p_3^{(1,1)} p_0^{(1,0,1,0,0)} v'_1 + 4 u'_{11} u'_{31} (u'_{32})^2 v'_3 p_3^{(0,1)} p_1^{(1,0)} p_3^{(1,1)} p_0^{(1,0,1,0,0)} v'_1 + \\
& 4 u'_{12} (u'_{31})^2 u'_{32} v'_3 p_1^{(0,1)} p_3^{(1,0)} p_3^{(1,1)} p_0^{(1,0,1,0,0)} v'_1 + 4 u'_{11} u'_{12} u'_{31} u'_{32} v'_3 p_1^{(1,1)} p_3^{(1,1)} p_0^{(1,0,1,0,0)} v'_1 + \\
& 2 u'_{11} (u'_{12})^2 u'_{31} v'_3 p_3^{(1,0)} p_1^{(1,2)} p_0^{(1,0,1,0,0)} v'_1 + 2 u'_{11} u'_{31} (u'_{32})^2 v'_3 p_1^{(1,0)} p_3^{(1,2)} p_0^{(1,0,1,0,0)} v'_1 + (u'_{11})^2 (u'_{32})^2 v'_3 (p_3^{(0,1)})^2 p_1^{(2,0)} p_0^{(1,0,1,0,0)} v'_1 + \\
& (u'_{11})^2 v'_3 u'_{32} p_3^{(0,1)} p_1^{(2,0)} p_0^{(1,0,1,0,0)} v'_1 + (u'_{11})^2 (u'_{32})^2 v'_3 p_3^{(0,2)} p_1^{(2,0)} p_0^{(1,0,1,0,0)} v'_1 + (u'_{31})^2 v'_3 u'_{12} p_1^{(0,1)} p_3^{(2,0)} p_0^{(1,0,1,0,0)} v'_1 + \\
& 2 u'_{12} (u'_{31})^2 u'_{32} v'_3 p_1^{(0,1)} p_3^{(0,1)} p_3^{(2,0)} p_0^{(1,0,1,0,0)} v'_1 + (u'_{12})^2 (u'_{31})^2 v'_3 p_1^{(0,2)} p_3^{(2,0)} p_0^{(1,0,1,0,0)} v'_1 + 2 (u'_{11})^2 u'_{12} u'_{32} v'_3 p_3^{(0,1)} p_1^{(2,1)} p_0^{(1,0,1,0,0)} v'_1 + \\
& 2 u'_{12} (u'_{31})^2 u'_{32} v'_3 p_1^{(0,1)} p_3^{(2,1)} p_0^{(1,0,1,0,0)} v'_1 + 2 u'_{12} (u'_{31})^2 u'_{52} v'_5 v'_3 p_1^{(0,1)} p_5^{(0,1)} (p_3^{(1,0)})^2 p_0^{(1,0,1,0,1)} v'_1 + \\
& 2 u'_{12} u'_{32} (u'_{51})^2 v'_3 v'_5 p_1^{(0,1)} p_5^{(0,1)} (p_5^{(1,0)})^2 p_0^{(1,0,1,0,1)} v'_1 + 2 u'_{32} u'_{52} v'_3 v'_5 u'_{11} p_3^{(0,1)} p_5^{(0,1)} p_1^{(1,0)} p_0^{(1,0,1,0,1)} v'_1 + \\
& 2 u'_{12} u'_{52} v'_3 v'_5 u'_{31} p_1^{(0,1)} p_5^{(0,1)} p_3^{(1,0)} p_0^{(1,0,1,0,1)} v'_1 + 2 u'_{11} u'_{31} (u'_{52})^2 v'_3 v'_5 (p_5^{(0,1)})^2 p_1^{(1,0)} p_3^{(1,0)} p_0^{(1,0,1,0,1)} v'_1 + \\
& 2 u'_{11} u'_{31} v'_3 v'_5 u'_{52} p_5^{(0,1)} p_1^{(1,0)} p_3^{(1,0)} p_0^{(1,0,1,0,1)} v'_1 + 4 u'_{11} u'_{31} u'_{32} u'_{52} v'_5 v'_3 p_3^{(0,1)} p_5^{(0,1)} p_1^{(1,0)} p_3^{(1,0)} p_0^{(1,0,1,0,1)} v'_1 +
\end{aligned}$$

$$\begin{aligned}
& 2 u'_{11} u'_{31} (u'_{52})^2 v'_3 v'_5 p_5^{(0,2)} p_1^{(1,0)} p_3^{(1,0)} p_0^{(1,0,1,0,1)} v'_1 + 2 u'_{12} u'_{32} v'_3 v'_5 u''_{51} p_1^{(0,1)} p_3^{(0,1)} p_5^{(1,0)} p_0^{(1,0,1,0,1)} v'_1 + \\
& 2 u'_{11} (u'_{32})^2 u'_{51} v'_3 v'_5 (p_3^{(0,1,1)})^2 p_1^{(1,0)} p_5^{(1,0)} p_0^{(1,0,1,0,1)} v'_1 + 2 u'_{11} u'_{51} v'_3 v'_5 u''_{32} p_3^{(0,1)} p_1^{(1,0)} p_5^{(1,0)} p_0^{(1,0,1,0,1)} v'_1 + \\
& 4 u'_{11} u'_{32} u'_{51} u'_{52} v'_3 v'_5 p_3^{(0,1)} p_5^{(0,1)} p_1^{(1,0)} p_5^{(1,0)} p_0^{(1,0,1,0,1)} v'_1 + 2 u'_{11} (u'_{32})^2 u'_{51} v'_3 v'_5 p_3^{(0,2)} p_1^{(1,0)} p_5^{(1,0)} p_0^{(1,0,1,0,1)} v'_1 + \\
& 2 u'_{31} u'_{51} v'_3 v'_5 u'_{12} p_1^{(0,1)} p_3^{(1,0)} p_5^{(1,0)} p_0^{(1,0,1,0,1)} v'_1 + 4 u'_{12} u'_{31} u'_{32} u'_{51} v'_3 v'_5 p_1^{(0,1)} p_3^{(0,1)} p_3^{(1,0)} p_5^{(1,0)} p_0^{(1,0,1,0,1)} v'_1 + \\
& 4 u'_{12} u'_{31} u'_{51} u'_{52} v'_3 v'_5 p_1^{(0,1)} p_5^{(0,1)} p_3^{(1,0)} p_5^{(1,0)} p_0^{(1,0,1,0,1)} v'_1 + 2 (u'_{12})^2 u'_{31} u'_{51} v'_3 v'_5 p_1^{(0,2)} p_3^{(1,0)} p_5^{(1,0)} p_0^{(1,0,1,0,1)} v'_1 + \\
& 4 u'_{11} u'_{12} u'_{31} u'_{52} v'_3 v'_5 p_5^{(0,1)} p_3^{(1,0)} p_1^{(1,1)} p_0^{(1,0,1,0,1)} v'_1 + 4 u'_{11} u'_{12} u'_{32} u'_{51} v'_3 v'_5 p_3^{(0,1)} p_5^{(1,0)} p_1^{(1,1)} p_0^{(1,0,1,0,1)} v'_1 + \\
& 4 u'_{11} u'_{31} u'_{32} u'_{52} v'_3 v'_5 p_5^{(0,1)} p_1^{(1,0)} p_3^{(1,1)} p_0^{(1,0,1,0,1)} v'_1 + 4 u'_{12} u'_{31} u'_{32} u'_{51} v'_3 v'_5 p_1^{(0,1)} p_5^{(1,0)} p_3^{(1,1)} p_0^{(1,0,1,0,1)} v'_1 + \\
& 4 u'_{11} u'_{32} u'_{51} u'_{52} v'_3 v'_5 p_3^{(0,1)} p_1^{(1,0)} p_5^{(1,1)} p_0^{(1,0,1,0,1)} v'_1 + 4 u'_{12} u'_{31} u'_{51} u'_{52} v'_3 v'_5 p_1^{(0,1)} p_3^{(1,0)} p_5^{(1,1)} p_0^{(1,0,1,0,1)} v'_1 + \\
& 2 (u'_{11})^2 u'_{32} u'_{52} v'_3 v'_5 p_3^{(0,1)} p_1^{(2,0)} p_0^{(1,0,1,0,1)} v'_1 + 2 u'_{12} (u'_{31})^2 u'_{52} v'_3 v'_5 p_1^{(0,1)} p_5^{(0,1)} p_3^{(2,0)} p_0^{(1,0,1,0,1)} v'_1 + \\
& 2 u'_{12} u'_{32} (u'_{51})^2 v'_3 v'_5 p_1^{(0,1)} p_3^{(0,1)} p_5^{(2,0)} p_0^{(1,0,1,0,1)} v'_1 + 2 u'_{12} u'_{32} (u'_{51})^2 v'_3 (v'_5)^2 p_1^{(0,1)} p_3^{(0,1)} (p_5^{(1,0)})^2 p_0^{(1,0,1,0,2)} v'_1 + \\
& 2 u'_{11} u'_{31} (u'_{52})^2 v'_3 (v'_5)^2 (p_5^{(0,1)})^2 p_1^{(1,0)} p_3^{(1,0)} p_0^{(1,0,1,0,2)} v'_1 + 4 u'_{11} u'_{32} u'_{51} u'_{52} v'_3 (v'_5)^2 p_3^{(0,1)} p_5^{(0,1)} p_1^{(1,0)} p_5^{(1,0)} p_0^{(1,0,1,0,2)} v'_1 + \\
& 4 u'_{12} u'_{31} u'_{51} u'_{52} v'_3 (v'_5)^2 p_1^{(0,1)} p_5^{(0,1)} p_3^{(1,0)} p_5^{(1,0)} p_0^{(1,0,1,0,2)} v'_1 + 2 u'_{12} (u'_{31})^2 u'_{42} v'_4 v'_5 p_1^{(0,1)} p_4^{(0,1)} (p_3^{(1,0)})^2 p_0^{(1,0,1,1,0)} v'_1 + \\
& 2 u'_{12} u'_{32} (u'_{41})^2 v'_3 v'_4 p_1^{(0,1)} p_3^{(0,1)} (p_4^{(1,0)})^2 p_0^{(1,0,1,1,0)} v'_1 + 2 u'_{32} u'_{42} v'_3 v'_4 u''_{11} p_3^{(0,1)} p_4^{(0,1)} p_1^{(1,0)} p_0^{(1,0,1,1,0)} v'_1 + \\
& 2 u'_{12} u'_{42} v'_3 v'_4 u''_{31} p_1^{(0,1)} p_4^{(0,1)} p_3^{(1,0)} p_0^{(1,0,1,1,0)} v'_1 + 2 u'_{11} u'_{31} (u'_{42})^2 v'_3 v'_4 (p_4^{(0,1)})^2 p_1^{(1,0)} p_3^{(1,0)} p_0^{(1,0,1,1,0)} v'_1 + \\
& 2 u'_{11} u'_{31} v'_3 v'_4 u''_{42} p_4^{(0,1)} p_1^{(1,0)} p_3^{(1,0)} p_0^{(1,0,1,1,0)} v'_1 + 4 u'_{11} u'_{31} u'_{32} u'_{42} v'_4 v'_5 p_3^{(0,1)} p_4^{(0,1)} p_1^{(1,0)} p_3^{(1,0)} p_0^{(1,0,1,1,0)} v'_1 + \\
& 2 u'_{11} u'_{31} (u'_{42})^2 v'_3 v'_4 p_4^{(0,2)} p_1^{(1,0)} p_3^{(1,0)} p_0^{(1,0,1,1,0)} v'_1 + 2 u'_{12} u'_{32} v'_3 v'_4 u''_{41} p_1^{(0,1)} p_3^{(0,1)} p_4^{(1,0)} p_0^{(1,0,1,1,0)} v'_1 + \\
& 2 u'_{11} (u'_{32})^2 u'_{41} v'_4 v'_5 (p_3^{(0,1)})^2 p_1^{(1,0)} p_4^{(1,0)} p_0^{(1,0,1,1,0)} v'_1 + 2 u'_{11} u'_{41} v'_3 v'_4 u''_{32} p_3^{(0,1)} p_1^{(1,0)} p_4^{(1,0)} p_0^{(1,0,1,1,0)} v'_1 + \\
& 4 u'_{11} u'_{32} u'_{41} u'_{42} v'_3 v'_4 p_3^{(0,1)} p_4^{(0,1)} p_1^{(1,0)} p_4^{(1,0)} p_0^{(1,0,1,1,0)} v'_1 + 2 u'_{11} (u'_{32})^2 u'_{41} v'_3 v'_4 p_3^{(0,2)} p_1^{(1,0)} p_4^{(1,0)} p_0^{(1,0,1,1,0)} v'_1 + \\
& 2 u'_{31} u'_{41} v'_3 v'_4 u'_{12} p_1^{(0,1)} p_3^{(1,0)} p_4^{(1,0)} p_0^{(1,0,1,1,0)} v'_1 + 4 u'_{12} u'_{31} u'_{32} u'_{41} v'_4 v'_5 p_1^{(0,1)} p_3^{(0,1)} p_3^{(1,0)} p_4^{(1,0)} p_0^{(1,0,1,1,0)} v'_1 + \\
& 4 u'_{12} u'_{31} u'_{41} u'_{42} v'_3 v'_4 p_1^{(0,1)} p_4^{(0,1)} p_3^{(1,0)} p_4^{(1,0)} p_0^{(1,0,1,1,0)} v'_1 + 2 (u'_{12})^2 u'_{31} u'_{41} v'_3 v'_4 p_1^{(0,2)} p_3^{(1,0)} p_4^{(1,0)} p_0^{(1,0,1,1,0)} v'_1 + \\
& 4 u'_{11} u'_{12} u'_{31} u'_{42} v'_3 v'_4 p_4^{(0,1)} p_3^{(1,0)} p_1^{(1,1)} p_0^{(1,0,1,1,0)} v'_1 + 4 u'_{11} u'_{12} u'_{32} u'_{41} v'_3 v'_4 p_3^{(0,1)} p_4^{(1,0)} p_1^{(1,1)} p_0^{(1,0,1,1,0)} v'_1 + \\
& 4 u'_{11} u'_{31} u'_{32} u'_{42} v'_3 v'_4 p_4^{(0,1)} p_1^{(1,0)} p_3^{(1,1)} p_0^{(1,0,1,1,0)} v'_1 + 4 u'_{12} u'_{31} u'_{32} u'_{41} v'_3 v'_4 p_1^{(0,1)} p_4^{(1,0)} p_3^{(1,1)} p_0^{(1,0,1,1,0)} v'_1 + \\
& 4 u'_{11} u'_{32} u'_{41} u'_{42} v'_3 v'_4 p_3^{(0,1)} p_1^{(1,0)} p_4^{(1,1)} p_0^{(1,0,1,1,0)} v'_1 + 4 u'_{12} u'_{31} u'_{41} u'_{42} v'_3 v'_4 p_1^{(0,1)} p_3^{(1,0)} p_4^{(1,1)} p_0^{(1,0,1,1,0)} v'_1 + \\
& 2 (u'_{11})^2 u'_{32} u'_{42} v'_3 v'_4 p_3^{(0,1)} p_4^{(0,1)} p_1^{(2,0)} p_0^{(1,0,1,1,0)} v'_1 + 2 u'_{12} (u'_{31})^2 u'_{42} v'_3 v'_4 p_1^{(0,1)} p_4^{(0,1)} p_3^{(2,0)} p_0^{(1,0,1,1,0)} v'_1 + \\
& 2 u'_{12} u'_{32} (u'_{41})^2 v'_3 v'_4 p_1^{(0,1)} p_3^{(0,1)} p_4^{(2,0)} p_0^{(1,0,1,1,0)} v'_1 + 4 u'_{11} u'_{31} u'_{42} u'_{52} v'_3 v'_4 v'_5 p_4^{(0,1)} p_5^{(0,1)} p_1^{(1,0)} p_3^{(1,0)} p_0^{(1,0,1,1,1)} v'_1 + \\
& 4 u'_{11} u'_{32} u'_{41} u'_{52} v'_3 v'_4 v'_5 p_3^{(0,1)} p_5^{(0,1)} p_1^{(1,0)} p_4^{(1,0)} p_0^{(1,0,1,1,1)} v'_1 + 4 u'_{12} u'_{31} u'_{41} u'_{52} v'_3 v'_4 v'_5 p_1^{(0,1)} p_5^{(0,1)} p_3^{(1,0)} p_4^{(1,0)} p_0^{(1,0,1,1,1)} v'_1 + \\
& 4 u'_{11} u'_{32} u'_{42} u'_{51} v'_3 v'_4 v'_5 p_3^{(0,1)} p_4^{(0,1)} p_1^{(1,0)} p_5^{(1,0)} p_0^{(1,0,1,1,1)} v'_1 + 4 u'_{12} u'_{31} u'_{42} u'_{51} v'_3 v'_4 v'_5 p_1^{(0,1)} p_4^{(0,1)} p_3^{(1,0)} p_5^{(1,0)} p_0^{(1,0,1,1,1)} v'_1 + \\
& 4 u'_{12} u'_{32} u'_{41} u'_{51} v'_3 v'_4 v'_5 p_1^{(0,1)} p_3^{(0,1)} p_4^{(1,0)} p_5^{(1,0)} p_0^{(1,0,1,1,1)} v'_1 + 2 u'_{12} u'_{32} (u'_{41})^2 v'_3 (v'_4)^2 p_1^{(0,1)} p_3^{(0,1)} (p_4^{(1,0)})^2 p_0^{(1,0,1,2,0)} v'_1 + \\
& 2 u'_{11} u'_{31} (u'_{42})^2 v'_3 (v'_4)^2 (p_4^{(0,1)})^2 p_1^{(1,0)} p_3^{(1,0)} p_0^{(1,0,1,2,0)} v'_1 + 4 u'_{11} u'_{32} u'_{41} u'_{42} v'_3 (v'_4)^2 p_3^{(0,1)} p_4^{(0,1)} p_1^{(1,0)} p_4^{(1,0)} p_0^{(1,0,1,2,0)} v'_1 + \\
& 4 u'_{12} u'_{31} u'_{41} u'_{42} v'_3 (v'_4)^2 p_1^{(0,1)} p_4^{(0,1)} p_3^{(1,0)} p_4^{(1,0)} p_0^{(1,0,1,2,0)} v'_1 + (u'_{31})^2 (v'_3)^2 u'_{12} p_1^{(0,1)} (p_3^{(1,0)})^2 p_0^{(1,0,2,0,0)} v'_1 + \\
& 6 u'_{12} (u'_{31})^2 u'_{32} v'_3 v'_5 p_1^{(0,1)} p_3^{(0,1)} (p_3^{(1,0)})^2 p_0^{(1,0,2,0,0)} v'_1 + (u'_{12})^2 (u'_{31})^2 (v'_3)^2 p_1^{(0,2)} (p_3^{(1,0)})^2 p_0^{(1,0,2,0,0)} v'_1 + \\
& (u'_{32})^2 (v'_3)^2 u''_{11} (p_3^{(0,1)})^2 p_1^{(1,0)} p_0^{(1,0,2,0,0)} v'_1 + 2 u'_{12} u'_{32} (v'_3)^2 u''_{31} p_1^{(0,1)} p_3^{(0,1)} p_3^{(1,0)} p_0^{(1,0,2,0,0)} v'_1 + \\
& 6 u'_{11} u'_{31} (u'_{32})^2 v'_3 v'_5 (p_3^{(0,1)})^2 p_1^{(1,0)} p_3^{(1,0)} p_0^{(1,0,2,0,0)} v'_1 + 2 u'_{11} u'_{31} (v'_3)^2 u''_{52} p_3^{(0,1)} p_1^{(1,0)} p_3^{(1,0)} p_0^{(1,0,2,0,0)} v'_1 + \\
& 2 u'_{11} u'_{31} (u'_{32})^2 (v'_3)^2 p_3^{(0,2)} p_1^{(1,0)} p_3^{(1,0)} p_0^{(1,0,2,0,0)} v'_1 + 4 u'_{11} u'_{12} u'_{31} u'_{32} (v'_3)^2 p_3^{(0,1)} p_3^{(1,0)} p_1^{(1,1)} p_0^{(1,0,2,0,0)} v'_1 + \\
& 4 u'_{11} u'_{31} (u'_{32})^2 (v'_3)^2 p_3^{(0,1)} p_1^{(1,0)} p_3^{(1,1)} p_0^{(1,0,2,0,0)} v'_1 + 4 u'_{12} (u'_{31})^2 u'_{32} (v'_3)^2 p_1^{(0,1)} p_3^{(0,1)} p_3^{(1,1)} p_0^{(1,0,2,0,0)} v'_1 + \\
& (u'_{11})^2 (u'_{32})^2 (v'_3)^2 (p_3^{(0,1)})^2 p_1^{(2,0)} p_0^{(1,0,2,0,0)} v'_1 + 2 u'_{12} (u'_{31})^2 u'_{32} (v'_3)^2 p_1^{(0,1)} p_3^{(0,1)} p_3^{(2,0)} p_0^{(1,0,2,0,0)} v'_1 + \\
& 2 u'_{12} (u'_{31})^2 u'_{52} (v'_3)^2 v'_5 p_1^{(0,1)} p_5^{(0,1)} (p_3^{(1,0)})^2 p_0^{(1,0,2,0,1)} v'_1 + 4 u'_{11} u'_{31} u'_{32} u'_{52} (v'_3)^2 v'_5 p_3^{(0,1)} p_5^{(0,1)} p_1^{(1,0)} p_3^{(1,0)} p_0^{(1,0,2,0,1)} v'_1 + \\
& 2 u'_{11} (u'_{32})^2 u'_{51} (v'_3)^2 v'_5 (p_3^{(0,1)})^2 p_1^{(1,0)} p_5^{(1,0)} p_0^{(1,0,2,0,1)} v'_1 + 4 u'_{12} u'_{31} u'_{32} u'_{51} (v'_3)^2 v'_5 p_1^{(0,1)} p_3^{(0,1)} p_3^{(1,0)} p_5^{(1,0)} p_0^{(1,0,2,0,1)} v'_1 + \\
& 2 u'_{12} (u'_{31})^2 u'_{42} (v'_3)^2 v'_4 p_1^{(0,1)} p_4^{(0,1)} (p_3^{(1,0)})^2 p_0^{(1,0,2,1,0)} v'_1 + 4 u'_{11} u'_{31} u'_{32} u'_{42} (v'_3)^2 v'_4 p_3^{(0,1)} p_4^{(0,1)} p_1^{(1,0)} p_3^{(1,0)} p_0^{(1,0,2,1,0)} v'_1 + \\
& 2 u'_{11} (u'_{32})^2 u'_{41} (v'_3)^2 v'_4 (p_3^{(0,1)})^2 p_1^{(1,0)} p_4^{(1,0)} p_0^{(1,0,2,1,0)} v'_1 + 4 u'_{12} u'_{31} u'_{32} u'_{41} (v'_3)^2 v'_4 p_1^{(0,1)} p_3^{(0,1)} p_3^{(1,0)} p_4^{(1,0)} p_0^{(1,0,2,1,0)} v'_1 + \\
& 2 u'_{12} (u'_{31})^2 u'_{32} (v'_3)^3 p_1^{(0,1)} p_3^{(0,1)} (p_3^{(1,0)})^2 p_0^{(1,0,3,0,0)} v'_1 + 2 u'_{11} u'_{31} (u'_{32})^2 (v'_3)^3 (p_3^{(0,1)})^2 p_1^{(1,0)} p_3^{(1,0)} p_0^{(1,0,3,0,0)} v'_1 + \\
& (u'_{21})^2 u''_{12} v''_2 p_1^{(0,1)} (p_2^{(1,0)})^2 p_0^{(1,1,0,0,0)} v'_1 + 2 u'_{12} (u'_{21})^2 u''_{22} v''_2 p_1^{(0,1)} p_2^{(0,1)} (p_2^{(1,0)})^2 p_0^{(1,1,0,0,0)} v'_1 + \\
& (u'_{12})^2 (u'_{21})^2 v''_2 p_1^{(0,2)} (p_2^{(1,0)})^2 p_0^{(1,1,0,0,0)} v'_1 + (u'_{22})^2 u''_{11} v''_2 (p_2^{(0,1)})^2 p_1^{(1,0)} p_0^{(1,1,0,0,0)} v'_1 + v'_2 u''_{11} u''_{22} p_2^{(0,1)} p_1^{(1,0)} p_0^{(1,1,0,0,0)} v'_1 + \\
& (u'_{22})^2 v'_2 u''_{11} p_2^{(0,2)} p_1^{(1,0)} p_0^{(1,1,0,0,0)} v'_1 + v'_2 u''_{12} u''_{21} p_1^{(0,1)} p_2^{(1,0)} p_0^{(1,1,0,0,0)} v'_1 + 2 u'_{12} u'_{22} u''_{21} v''_2 p_1^{(0,1)} p_2^{(0,1)} p_2^{(1,0)} p_0^{(1,1,0,0,0)} v'_1 + \\
& (u'_{12})^2 v'_2 u''_{21} p_1^{(0,2)} p_2^{(1,0)} p_0^{(1,1,0,0,0)} v'_1 + 2 u'_{11} u'_{21} (u'_{22})^2 v''_2 (p_2^{(0,1)})^2 p_1^{(1,0)} p_2^{(1,0)} p_0^{(1,1,0,0,0)} v'_1 + \\
& 2 u'_{11} u'_{21} u''_{22} v''_2 p_2^{(0,1)} p_1^{(1,0)} p_2^{(1,0)} p_0^{(1,1,0,0,0)} v'_1 + 2 u'_{11} u'_{21} (u'_{22})^2 v''_2 p_2^{(0,2)} p_1^{(1,0)} p_2^{(1,0)} p_0^{(1,1,0,0,0)} v'_1 +
\end{aligned}$$

$$\begin{aligned}
& 2 u'_{12} u'_{22} v_2 u''_{11} p_2^{(0,1)} p_1^{(1,1)} p_0^{(1,1,0,0,0)} v'_1 + 2 u'_{11} u'_{21} v_2 u''_{12} p_2^{(1,0)} p_1^{(1,1)} p_0^{(1,1,0,0,0)} v'_1 + 4 u'_{11} u'_{12} u'_{21} u'_{22} v_2'' p_2^{(0,1)} p_2^{(1,0)} p_1^{(1,1)} p_0^{(1,1,0,0,0)} v'_1 + \\
& 2 u'_{12} u'_{22} v_2 u''_{21} p_1^{(0,1)} p_2^{(1,1)} p_0^{(1,1,0,0,0)} v'_1 + 2 u'_{11} u'_{21} v_2 u''_{22} p_1^{(1,0)} p_2^{(1,1)} p_0^{(1,1,0,0,0)} v'_1 + 4 u'_{11} u'_{21} (u'_{22})^2 v_2'' p_2^{(0,1)} p_1^{(1,0)} p_2^{(1,1)} p_0^{(1,1,0,0,0)} v'_1 + \\
& 4 u'_{12} (u'_{21})^2 u'_{22} v_2'' p_1^{(0,1)} p_2^{(1,0)} p_2^{(1,1)} p_0^{(1,1,0,0,0)} v'_1 + 4 u'_{11} u'_{12} u'_{21} u'_{22} v_2 p_1^{(1,1)} p_2^{(1,1)} p_0^{(1,1,0,0,0)} v'_1 + \\
& 2 u'_{11} (u'_{12})^2 u'_{21} v_2 p_2^{(1,0)} p_1^{(2,0)} p_0^{(1,1,0,0,0)} v'_1 + 2 u'_{11} u'_{21} (u'_{22})^2 v_2 p_1^{(1,0)} p_2^{(1,2)} p_0^{(1,1,0,0,0)} v'_1 + (u'_{11})^2 (u'_{22})^2 v_2'' (p_2^{(0,1)})^2 p_1^{(2,0)} p_0^{(1,1,0,0,0)} v'_1 + \\
& (u'_{11})^2 v_2 u''_{22} p_2^{(0,1)} p_1^{(2,0)} p_0^{(1,1,0,0,0)} v'_1 + (u'_{11})^2 (u'_{22})^2 v_2 p_2^{(2,0)} p_1^{(2,0)} p_0^{(1,1,0,0,0)} v'_1 + (u'_{21})^2 v_2 u''_{11} p_1^{(0,1)} p_2^{(2,0)} p_0^{(1,1,0,0,0)} v'_1 + \\
& 2 u'_{12} (u'_{21})^2 u'_{22} v_2'' p_1^{(0,1)} p_2^{(1,0)} p_2^{(2,0)} p_0^{(1,1,0,0,0)} v'_1 + (u'_{12})^2 (u'_{21})^2 v_2 p_1^{(0,2)} p_2^{(2,0)} p_0^{(1,1,0,0,0)} v'_1 + 2 (u'_{11})^2 u'_{12} u'_{22} v_2 p_2^{(0,1)} p_1^{(2,1)} p_0^{(1,1,0,0,0)} v'_1 + \\
& 2 u'_{12} (u'_{21})^2 u'_{22} v_2 p_1^{(0,1)} p_2^{(2,1)} p_0^{(1,1,0,0,0)} v'_1 + 2 u'_{12} (u'_{21})^2 u'_{22} v_5 v_2'' p_1^{(0,1)} p_5^{(0,1)} (p_2^{(1,0)})^2 p_0^{(1,1,0,0,1)} v'_1 + \\
& 2 u'_{12} u'_{22} (u'_{51})^2 v_2 v_5'' p_1^{(0,1)} p_2^{(0,1)} (p_5^{(1,0)})^2 p_0^{(1,1,0,0,1)} v'_1 + 2 u'_{22} u'_{52} v_2 v_5 u''_{11} p_2^{(0,1)} p_5^{(0,1)} p_1^{(1,0)} p_0^{(1,1,0,0,1)} v'_1 + \\
& 2 u'_{12} u'_{52} v_2 v_5 u''_{21} p_1^{(0,1)} p_5^{(0,1)} p_2^{(1,0)} p_0^{(1,1,0,0,1)} v'_1 + 2 u'_{11} u'_{21} (u'_{52})^2 v_2 v_5'' (p_5^{(0,1)})^2 p_1^{(1,0)} p_2^{(1,0)} p_0^{(1,1,0,0,1)} v'_1 + \\
& 2 u'_{11} u'_{21} v_2 v_5 u''_{52} p_5^{(0,1)} p_1^{(1,0)} p_2^{(1,0)} p_0^{(1,1,0,0,1)} v'_1 + 4 u'_{11} u'_{21} u'_{22} u'_{52} v_5 v_2'' p_2^{(0,1)} p_5^{(0,1)} p_1^{(1,0)} p_2^{(1,0)} p_0^{(1,1,0,0,1)} v'_1 + \\
& 2 u'_{11} u'_{21} (u'_{52})^2 v_2 v_5 p_5^{(0,2)} p_1^{(1,0)} p_2^{(1,0)} p_0^{(1,1,0,0,1)} v'_1 + 2 u'_{12} u'_{22} v_2 v_5 u''_{51} p_1^{(0,1)} p_2^{(0,1)} p_5^{(1,0)} p_0^{(1,1,0,0,1)} v'_1 + \\
& 2 u'_{11} (u'_{22})^2 u'_{51} v_5 v_2'' (p_2^{(0,1)})^2 p_1^{(1,0)} p_5^{(1,0)} p_0^{(1,1,0,0,1)} v'_1 + 2 u'_{11} u'_{51} v_2 v_5 u''_{22} p_2^{(0,1)} p_1^{(1,0)} p_5^{(1,0)} p_0^{(1,1,0,0,1)} v'_1 + \\
& 4 u'_{11} u'_{22} u'_{51} u'_{52} v_2 v_5'' p_2^{(0,1)} p_5^{(0,1)} p_1^{(1,0)} p_5^{(0,2)} p_0^{(1,1,0,0,1)} v'_1 + 2 u'_{11} (u'_{22})^2 u'_{51} v_2 v_5 p_2^{(0,2)} p_1^{(1,0)} p_5^{(1,0)} p_0^{(1,1,0,0,1)} v'_1 + \\
& 2 u'_{21} u'_{51} v_2 v_5 u''_{12} p_1^{(0,1)} p_2^{(1,0)} p_5^{(1,0)} p_0^{(1,1,0,0,1)} v'_1 + 4 u'_{12} u'_{21} u'_{22} u'_{51} v_5 v_2'' p_1^{(0,1)} p_2^{(0,1)} p_2^{(1,0)} p_5^{(1,0)} p_0^{(1,1,0,0,1)} v'_1 + \\
& 4 u'_{12} u'_{21} u'_{51} u'_{52} v_2 v_5'' p_1^{(0,1)} p_5^{(0,1)} p_2^{(1,0)} p_5^{(1,0)} p_0^{(1,1,0,0,1)} v'_1 + 2 (u'_{12})^2 u'_{21} u'_{51} v_2 v_5 p_1^{(0,2)} p_2^{(1,0)} p_5^{(1,0)} p_0^{(1,1,0,0,1)} v'_1 + \\
& 4 u'_{11} u'_{12} u'_{21} u'_{52} v_2 v_5 p_5^{(0,1)} p_2^{(1,0)} p_1^{(1,1)} p_0^{(1,1,0,0,1)} v'_1 + 4 u'_{11} u'_{12} u'_{22} u'_{51} v_2 v_5 p_2^{(0,1)} p_5^{(1,0)} p_1^{(1,1)} p_0^{(1,1,0,0,1)} v'_1 + \\
& 4 u'_{11} u'_{21} u'_{22} u'_{52} v_2 v_5 p_5^{(0,1)} p_1^{(1,0)} p_2^{(1,1)} p_0^{(1,1,0,0,1)} v'_1 + 4 u'_{12} u'_{21} u'_{22} u'_{51} v_2 v_5 p_1^{(0,1)} p_5^{(1,0)} p_2^{(1,1)} p_0^{(1,1,0,0,1)} v'_1 + \\
& 4 u'_{11} u'_{22} u'_{51} u'_{52} v_2 v_5 p_2^{(0,1)} p_1^{(1,0)} p_5^{(1,1)} p_0^{(1,1,0,0,1)} v'_1 + 4 u'_{12} u'_{21} u'_{51} u'_{52} v_2 v_5 p_1^{(0,1)} p_2^{(1,0)} p_5^{(1,1)} p_0^{(1,1,0,0,1)} v'_1 + \\
& 2 (u'_{11})^2 u'_{22} u'_{52} v_2 v_5 p_2^{(0,1)} p_5^{(0,1)} p_1^{(2,0)} p_0^{(1,1,0,0,1)} v'_1 + 2 u'_{12} (u'_{21})^2 u'_{52} v_2 v_5 p_1^{(0,1)} p_5^{(0,1)} p_2^{(2,0)} p_0^{(1,1,0,0,1)} v'_1 + \\
& 2 u'_{12} u'_{22} (u'_{51})^2 v_2 v_5 p_1^{(0,1)} p_2^{(0,1)} p_5^{(2,0)} p_0^{(1,1,0,0,1)} v'_1 + 2 u'_{12} u'_{22} (u'_{51})^2 v_2 (v_5')^2 p_1^{(0,1)} p_2^{(0,1)} (p_5^{(1,0)})^2 p_0^{(1,1,0,0,2)} v'_1 + \\
& 2 u'_{11} u'_{21} (u'_{52})^2 v_2 (v_5')^2 (p_5^{(0,1)})^2 p_1^{(1,0)} p_2^{(1,0)} p_0^{(1,1,0,0,2)} v'_1 + 4 u'_{11} u'_{22} u'_{51} u'_{52} v_2 (v_5')^2 p_2^{(0,1)} p_5^{(0,1)} p_1^{(1,0)} p_5^{(1,0)} p_0^{(1,1,0,0,2)} v'_1 + \\
& 4 u'_{12} u'_{21} u'_{51} u'_{52} v_2 (v_5')^2 p_1^{(0,1)} p_5^{(0,1)} p_2^{(1,0)} p_5^{(1,0)} p_0^{(1,1,0,0,2)} v'_1 + 2 u'_{12} (u'_{21})^2 u'_{42} v_4 v_2'' p_1^{(0,1)} p_4^{(0,1)} (p_2^{(1,0)})^2 p_0^{(1,1,0,1,0)} v'_1 + \\
& 2 u'_{12} u'_{22} (u'_{41})^2 v_2 v_4'' p_1^{(0,1)} p_2^{(0,1)} (p_4^{(1,0)})^2 p_0^{(1,1,0,1,0)} v'_1 + 2 u'_{22} u'_{42} v_2 v_4 u''_{11} p_2^{(0,1)} p_4^{(0,1)} p_1^{(1,0)} p_0^{(1,1,0,1,0)} v'_1 + \\
& 2 u'_{12} u'_{42} v_2 v_4 u''_{21} p_1^{(0,1)} p_4^{(0,1)} p_2^{(1,0)} p_0^{(1,1,0,1,0)} v'_1 + 2 u'_{11} u'_{21} (u'_{42})^2 v_2 v_4'' (p_4^{(0,1)})^2 p_1^{(1,0)} p_2^{(1,0)} p_0^{(1,1,0,1,0)} v'_1 + \\
& 2 u'_{11} u'_{21} v_2 v_4 u''_{42} p_4^{(0,1)} p_1^{(1,0)} p_2^{(1,0)} p_0^{(1,1,0,1,0)} v'_1 + 4 u'_{11} u'_{21} u'_{22} u'_{42} v_4 v_2'' p_2^{(0,1)} p_4^{(0,1)} p_1^{(1,0)} p_2^{(1,0)} p_0^{(1,1,0,1,0)} v'_1 + \\
& 2 u'_{11} u'_{21} (u'_{42})^2 v_2 v_4 p_4^{(0,2)} p_1^{(1,0)} p_2^{(1,0)} p_0^{(1,1,0,1,0)} v'_1 + 2 u'_{12} u'_{22} v_2 v_4 u''_{41} p_1^{(0,1)} p_2^{(0,1)} p_4^{(1,0)} p_0^{(1,1,0,1,0)} v'_1 + \\
& 2 u'_{11} (u'_{22})^2 u'_{41} v_4 v_2'' (p_2^{(0,1)})^2 p_1^{(1,0)} p_4^{(1,0)} p_0^{(1,1,0,1,0)} v'_1 + 2 u'_{11} u'_{41} v_2 v_4 u''_{22} p_2^{(0,1)} p_1^{(1,0)} p_4^{(1,0)} p_0^{(1,1,0,1,0)} v'_1 + \\
& 4 u'_{11} u'_{22} u'_{41} u'_{42} v_2 v_4'' p_2^{(0,1)} p_4^{(0,1)} p_1^{(1,0)} p_4^{(0,2)} p_0^{(1,1,0,1,0)} v'_1 + 2 u'_{11} (u'_{22})^2 u'_{41} v_2 v_4 p_2^{(0,2)} p_1^{(1,0)} p_4^{(1,0)} p_0^{(1,1,0,1,0)} v'_1 + \\
& 2 u'_{21} u'_{41} v_2 v_4 u''_{12} p_1^{(0,1)} p_2^{(1,0)} p_4^{(1,0)} p_0^{(1,1,0,1,0)} v'_1 + 4 u'_{12} u'_{21} u'_{22} u'_{41} v_4 v_2'' p_1^{(0,1)} p_2^{(0,1)} p_2^{(1,0)} p_4^{(1,0)} p_0^{(1,1,0,1,0)} v'_1 + \\
& 4 u'_{12} u'_{21} u'_{41} u'_{42} v_2 v_4'' p_1^{(0,1)} p_4^{(0,1)} p_2^{(1,0)} p_4^{(1,0)} p_0^{(1,1,0,1,0)} v'_1 + 2 (u'_{12})^2 u'_{21} u'_{41} v_2 v_4 p_1^{(0,2)} p_2^{(1,0)} p_4^{(1,0)} p_0^{(1,1,0,1,0)} v'_1 + \\
& 4 u'_{11} u'_{12} u'_{21} u'_{42} v_2 v_4 p_4^{(0,1)} p_2^{(1,1)} p_1^{(1,0)} p_0^{(1,1,0,1,0)} v'_1 + 4 u'_{11} u'_{12} u'_{22} u'_{41} v_2 v_4 p_2^{(0,1)} p_4^{(1,0)} p_1^{(1,1)} p_0^{(1,1,0,1,0)} v'_1 + \\
& 4 u'_{11} u'_{21} u'_{22} u'_{42} v_2 v_4 p_4^{(0,1)} p_1^{(1,0)} p_2^{(1,1)} p_0^{(1,1,0,1,0)} v'_1 + 4 u'_{12} u'_{21} u'_{22} u'_{41} v_2 v_4 p_1^{(0,1)} p_4^{(1,0)} p_2^{(1,1)} p_0^{(1,1,0,1,0)} v'_1 + \\
& 4 u'_{11} u'_{22} u'_{41} u'_{42} v_2 v_4 p_2^{(0,1)} p_1^{(1,0)} p_4^{(1,1)} p_0^{(1,1,0,1,0)} v'_1 + 4 u'_{12} u'_{21} u'_{41} u'_{42} v_2 v_4 p_1^{(0,1)} p_2^{(1,0)} p_4^{(1,1)} p_0^{(1,1,0,1,0)} v'_1 + \\
& 2 (u'_{11})^2 u'_{22} u'_{42} v_2 v_4 p_2^{(0,1)} p_4^{(0,1)} p_1^{(2,0)} p_0^{(1,1,0,1,0)} v'_1 + 2 u'_{12} (u'_{21})^2 u'_{42} v_2 v_4 p_1^{(0,1)} p_4^{(0,1)} p_2^{(2,0)} p_0^{(1,1,0,1,0)} v'_1 + \\
& 2 u'_{12} u'_{22} (u'_{41})^2 v_2 v_4 p_1^{(0,1)} p_2^{(0,1)} p_4^{(2,0)} p_0^{(1,1,0,1,0)} v'_1 + 4 u'_{11} u'_{21} u'_{42} u'_{52} v_2 v_4 v_5 p_4^{(0,1)} p_5^{(0,1)} p_1^{(1,0)} p_2^{(1,0)} p_0^{(1,1,0,1,1)} v'_1 + \\
& 4 u'_{11} u'_{22} u'_{41} u'_{52} v_2 v_4 v_5 p_2^{(0,1)} p_5^{(0,1)} p_1^{(1,0)} p_4^{(1,0)} p_0^{(1,1,0,1,1)} v'_1 + 4 u'_{12} u'_{21} u'_{41} u'_{52} v_2 v_4 v_5 p_1^{(0,1)} p_5^{(0,1)} p_2^{(1,0)} p_4^{(1,0)} p_0^{(1,1,0,1,1)} v'_1 + \\
& 4 u'_{11} u'_{22} u'_{42} u'_{51} v_2 v_4 v_5 p_2^{(0,1)} p_4^{(0,1)} p_1^{(1,0)} p_5^{(1,0)} p_0^{(1,1,0,1,1)} v'_1 + 4 u'_{12} u'_{21} u'_{42} u'_{51} v_2 v_4 v_5 p_1^{(0,1)} p_4^{(0,1)} p_2^{(1,0)} p_5^{(1,0)} p_0^{(1,1,0,1,1)} v'_1 + \\
& 4 u'_{12} u'_{22} u'_{41} u'_{51} v_2 v_4 v_5 p_1^{(0,1)} p_2^{(1,0)} p_4^{(1,0)} p_5^{(1,0)} p_0^{(1,1,0,1,1)} v'_1 + 2 u'_{12} u'_{22} (u'_{41})^2 v_2 (v_4')^2 p_1^{(0,1)} p_2^{(0,1)} (p_4^{(1,0)})^2 p_0^{(1,1,0,2,0)} v'_1 + \\
& 2 u'_{11} u'_{21} (u'_{42})^2 v_2 (v_4')^2 (p_4^{(0,1)})^2 p_1^{(1,0)} p_2^{(1,0)} p_0^{(1,1,0,2,0)} v'_1 + 4 u'_{11} u'_{22} u'_{41} u'_{42} v_2 (v_4')^2 p_2^{(0,1)} p_4^{(0,1)} p_1^{(1,0)} p_4^{(1,0)} p_0^{(1,1,0,2,0)} v'_1 + \\
& 4 u'_{12} u'_{21} u'_{41} u'_{42} v_2 (v_4')^2 p_1^{(0,1)} p_4^{(0,1)} p_2^{(1,0)} p_4^{(1,0)} p_0^{(1,1,0,2,0)} v'_1 + 2 u'_{12} (u'_{21})^2 u'_{32} v_3 v_2'' p_1^{(0,1)} p_3^{(0,1)} (p_2^{(1,0)})^2 p_0^{(1,1,1,0,0)} v'_1 + \\
& 2 u'_{12} u'_{22} (u'_{31})^2 v_2 v_3'' p_1^{(0,1)} p_2^{(0,1)} (p_3^{(1,0)})^2 p_0^{(1,1,1,0,0)} v'_1 + 2 u'_{22} u'_{32} v_2 v_3 u''_{11} p_2^{(0,1)} p_3^{(0,1)} p_1^{(1,0)} p_0^{(1,1,1,0,0)} v'_1 + \\
& 2 u'_{12} u'_{32} v_2 v_3 u''_{21} p_1^{(0,1)} p_3^{(0,1)} p_2^{(1,0)} p_0^{(1,1,1,0,0)} v'_1 + 2 u'_{11} u'_{21} (u'_{32})^2 v_2 v_3'' (p_3^{(0,1)})^2 p_1^{(1,0)} p_2^{(1,0)} p_0^{(1,1,1,0,0)} v'_1 + \\
& 2 u'_{11} u'_{21} v_2 v_3 u''_{32} p_3^{(0,1)} p_1^{(1,0)} p_2^{(1,0)} p_0^{(1,1,1,0,0)} v'_1 + 4 u'_{11} u'_{21} u'_{22} u'_{32} v_3 v_2'' p_2^{(0,1)} p_3^{(0,1)} p_1^{(1,0)} p_2^{(1,0)} p_0^{(1,1,1,0,0)} v'_1 + \\
& 2 u'_{11} u'_{21} (u'_{32})^2 v_2 v_3 p_3^{(0,2)} p_1^{(1,0)} p_2^{(1,0)} p_0^{(1,1,1,0,0)} v'_1 + 2 u'_{12} u'_{22} v_2 v_3 u''_{31} p_1^{(0,1)} p_2^{(0,1)} p_3^{(1,0)} p_0^{(1,1,1,0,0)} v'_1 + \\
& 2 u'_{11} (u'_{22})^2 u'_{31} v_3 v_2'' (p_2^{(0,1)})^2 p_1^{(1,0)} p_3^{(1,0)} p_0^{(1,1,1,0,0)} v'_1 + 2 u'_{11} u'_{31} v_2 v_3 u''_{22} p_2^{(0,1)} p_1^{(1,0)} p_3^{(1,0)} p_0^{(1,1,1,0,0)} v'_1 + \\
& 4 u'_{11} u'_{22} u'_{31} u'_{32} v_2 v_3 p_2^{(0,1)} p_3^{(0,1)} p_1^{(1,0)} p_3^{(1,0)} p_0^{(1,1,1,0,0)} v'_1 + 2 u'_{11} (u'_{22})^2 u'_{31} v_2 v_3 p_2^{(0,2)} p_1^{(1,0)} p_3^{(1,0)} p_0^{(1,1,1,0,0)} v'_1 + \\
& 2 u'_{21} u'_{31} v_2 v_3 u''_{12} p_1^{(0,1)} p_2^{(1,0)} p_3^{(1,0)} p_0^{(1,1,1,0,0)} v'_1 + 4 u'_{12} u'_{21} u'_{22} u'_{31} v_3 v_2'' p_1^{(0,1)} p_2^{(0,1)} p_2^{(1,0)} p_3^{(1,0)} p_0^{(1,1,1,0,0)} v'_1 +
\end{aligned}$$

$$\begin{aligned}
& 4 u'_{12} u'_{21} u'_{31} u'_{32} v'_2 v'_3 p_1^{(0,1)} p_3^{(0,1)} p_2^{(1,0)} p_3^{(1,0)} p_0^{(1,1,1,0,0)} v'_1 + 2 (u'_{12})^2 u'_{21} u'_{31} v'_2 v'_3 p_1^{(0,2)} p_2^{(1,0)} p_3^{(1,0)} p_0^{(1,1,1,0,0)} v'_1 + \\
& 4 u'_{11} u'_{12} u'_{21} u'_{32} v'_2 v'_3 p_3^{(0,1)} p_2^{(1,0)} p_1^{(1,1)} p_0^{(1,1,1,0,0)} v'_1 + 4 u'_{11} u'_{12} u'_{22} u'_{31} v'_2 v'_3 p_2^{(0,1)} p_3^{(1,0)} p_1^{(1,1)} p_0^{(1,1,1,0,0)} v'_1 + \\
& 4 u'_{11} u'_{21} u'_{22} u'_{32} v'_2 v'_3 p_3^{(0,1)} p_1^{(1,0)} p_2^{(1,1)} p_0^{(1,1,1,0,0)} v'_1 + 4 u'_{12} u'_{21} u'_{22} u'_{31} v'_2 v'_3 p_1^{(0,1)} p_3^{(1,0)} p_2^{(1,1)} p_0^{(1,1,1,0,0)} v'_1 + \\
& 4 u'_{11} u'_{22} u'_{31} u'_{32} v'_2 v'_3 p_2^{(0,1)} p_1^{(1,0)} p_3^{(1,1)} p_0^{(1,1,1,0,0)} v'_1 + 4 u'_{12} u'_{21} u'_{31} u'_{32} v'_2 v'_3 p_1^{(0,1)} p_2^{(1,0)} p_3^{(1,1)} p_0^{(1,1,1,0,0)} v'_1 + \\
& 2 (u'_{11})^2 u'_{22} u'_{32} v'_2 v'_3 p_2^{(0,1)} p_3^{(0,1)} p_1^{(2,0)} p_0^{(1,1,1,0,0)} v'_1 + 2 u'_{12} (u'_{21})^2 u'_{32} v'_2 v'_3 p_1^{(0,1)} p_3^{(0,1)} p_2^{(2,0)} p_0^{(1,1,1,0,0)} v'_1 + \\
& 2 u'_{12} u'_{22} (u'_{31})^2 v'_2 v'_3 p_1^{(0,1)} p_2^{(2,0)} p_3^{(2,0)} p_0^{(1,1,1,0,0)} v'_1 + 4 u'_{11} u'_{21} u'_{32} u'_{32} v'_2 v'_3 v'_5 p_3^{(0,1)} p_5^{(0,1)} p_1^{(1,0)} p_2^{(1,0)} p_0^{(1,1,1,0,1)} v'_1 + \\
& 4 u'_{11} u'_{22} u'_{31} u'_{52} v'_2 v'_3 v'_5 p_2^{(0,1)} p_5^{(0,1)} p_1^{(1,0)} p_3^{(1,0)} p_0^{(1,1,1,0,1)} v'_1 + 4 u'_{12} u'_{21} u'_{31} u'_{52} v'_2 v'_3 v'_5 p_1^{(0,1)} p_5^{(0,1)} p_2^{(1,0)} p_3^{(1,0)} p_0^{(1,1,1,0,1)} v'_1 + \\
& 4 u'_{11} u'_{22} u'_{32} u'_{51} v'_2 v'_3 v'_5 p_2^{(0,1)} p_3^{(0,1)} p_1^{(1,0)} p_5^{(1,0)} p_0^{(1,1,1,0,1)} v'_1 + 4 u'_{12} u'_{21} u'_{32} u'_{51} v'_2 v'_3 v'_5 p_1^{(0,1)} p_3^{(0,1)} p_2^{(1,0)} p_5^{(1,0)} p_0^{(1,1,1,0,1)} v'_1 + \\
& 4 u'_{12} u'_{22} u'_{31} u'_{51} v'_2 v'_3 v'_5 p_1^{(0,1)} p_2^{(0,1)} p_3^{(1,0)} p_5^{(1,0)} p_0^{(1,1,1,0,1)} v'_1 + 4 u'_{11} u'_{21} u'_{32} u'_{42} v'_2 v'_3 v'_4 p_3^{(0,1)} p_4^{(0,1)} p_1^{(1,0)} p_2^{(1,0)} p_0^{(1,1,1,1,0)} v'_1 + \\
& 4 u'_{11} u'_{22} u'_{31} u'_{42} v'_2 v'_3 v'_4 p_2^{(0,1)} p_4^{(0,1)} p_1^{(1,0)} p_3^{(1,0)} p_0^{(1,1,1,1,0)} v'_1 + 4 u'_{12} u'_{21} u'_{31} u'_{42} v'_2 v'_3 v'_4 p_1^{(0,1)} p_4^{(0,1)} p_2^{(1,0)} p_3^{(1,0)} p_0^{(1,1,1,1,0)} v'_1 + \\
& 4 u'_{11} u'_{22} u'_{32} u'_{41} v'_2 v'_3 v'_4 p_2^{(0,1)} p_3^{(0,1)} p_1^{(1,0)} p_4^{(1,0)} p_0^{(1,1,1,1,0)} v'_1 + 4 u'_{12} u'_{21} u'_{32} u'_{41} v'_2 v'_3 v'_4 p_1^{(0,1)} p_3^{(0,1)} p_2^{(1,0)} p_4^{(1,0)} p_0^{(1,1,1,1,0)} v'_1 + \\
& 4 u'_{12} u'_{22} u'_{31} u'_{41} v'_2 v'_3 v'_4 p_1^{(0,1)} p_2^{(0,1)} p_3^{(1,0)} p_4^{(1,0)} p_0^{(1,1,1,1,0)} v'_1 + 2 u'_{12} u'_{22} (u'_{31})^2 v'_2 (v'_3)^2 p_1^{(0,1)} p_2^{(0,1)} (p_3^{(1,0)})^2 p_0^{(1,1,2,0,0)} v'_1 + \\
& 2 u'_{11} u'_{21} (u'_{32})^2 v'_2 (v'_3)^2 (p_3^{(0,1)})^2 p_1^{(1,0)} p_2^{(1,0)} p_0^{(1,1,2,0,0)} v'_1 + 4 u'_{11} u'_{22} u'_{31} u'_{32} v'_2 (v'_3)^2 p_2^{(0,1)} p_3^{(0,1)} p_1^{(1,0)} p_3^{(1,0)} p_0^{(1,1,2,0,0)} v'_1 + \\
& 4 u'_{12} u'_{21} u'_{31} u'_{32} v'_2 (v'_3)^2 p_1^{(0,1)} p_3^{(0,1)} p_2^{(1,0)} p_3^{(1,0)} p_0^{(1,1,2,0,0)} v'_1 + (u'_{21})^2 (v'_2)^2 u'_{12} p_1^{(0,1)} (p_2^{(1,0)})^2 p_0^{(1,2,0,0,0)} v'_1 + \\
& 6 u'_{12} (u'_{21})^2 u'_{22} v'_2 v'_2 p_1^{(0,1)} p_2^{(0,1)} (p_2^{(1,0)})^2 p_0^{(1,2,0,0,0)} v'_1 + (u'_{12})^2 (u'_{21})^2 (v'_2)^2 p_1^{(0,2)} (p_2^{(1,0)})^2 p_0^{(1,2,0,0,0)} v'_1 + \\
& (u'_{22})^2 (v'_2)^2 u'_{11} (p_2^{(0,1)})^2 p_1^{(1,0)} p_0^{(1,2,0,0,0)} v'_1 + 2 u'_{12} u'_{22} (v'_2)^2 u'_{21} p_1^{(0,1)} p_2^{(0,1)} p_2^{(1,0)} p_0^{(1,2,0,0,0)} v'_1 + \\
& 6 u'_{11} u'_{21} (u'_{22})^2 v'_2 v'_2 (p_2^{(0,1)})^2 p_1^{(1,0)} p_2^{(1,0)} p_0^{(1,2,0,0,0)} v'_1 + 2 u'_{11} u'_{21} (v'_2)^2 u'_{22} p_2^{(0,1)} p_1^{(1,0)} p_2^{(1,0)} p_0^{(1,2,0,0,0)} v'_1 + \\
& 2 u'_{11} u'_{21} (u'_{22})^2 (v'_2)^2 p_2^{(0,2)} p_1^{(1,0)} p_2^{(1,0)} p_0^{(1,2,0,0,0)} v'_1 + 4 u'_{11} u'_{12} u'_{21} u'_{22} (v'_2)^2 p_2^{(0,1)} p_2^{(1,0)} p_1^{(1,1)} p_0^{(1,2,0,0,0)} v'_1 + \\
& 4 u'_{11} u'_{21} (u'_{22})^2 (v'_2)^2 p_2^{(0,1)} p_1^{(1,0)} p_2^{(1,1)} p_0^{(1,2,0,0,0)} v'_1 + 4 u'_{12} (u'_{21})^2 u'_{22} (v'_2)^2 p_1^{(0,1)} p_2^{(1,0)} p_2^{(1,1)} p_0^{(1,2,0,0,0)} v'_1 + \\
& (u'_{11})^2 (u'_{22})^2 (v'_2)^2 (p_2^{(0,1)})^2 p_1^{(2,0)} p_0^{(1,2,0,0,0)} v'_1 + 2 u'_{12} (u'_{21})^2 u'_{22} (v'_2)^2 p_1^{(0,1)} p_2^{(0,1)} p_2^{(2,0)} p_0^{(1,2,0,0,0)} v'_1 + \\
& 2 u'_{12} (u'_{21})^2 u'_{52} (v'_2)^2 v'_5 p_1^{(0,1)} p_5^{(0,1)} (p_2^{(1,0)})^2 p_0^{(1,2,0,0,1)} v'_1 + 4 u'_{11} u'_{21} u'_{22} u'_{52} (v'_2)^2 v'_5 p_2^{(0,1)} p_5^{(0,1)} p_1^{(1,0)} p_2^{(1,0)} p_0^{(1,2,0,0,1)} v'_1 + \\
& 2 u'_{11} (u'_{22})^2 u'_{51} (v'_2)^2 v'_5 (p_2^{(0,1)})^2 p_1^{(1,0)} p_5^{(1,0)} p_0^{(1,2,0,0,1)} v'_1 + 4 u'_{12} u'_{21} u'_{22} u'_{51} (v'_2)^2 v'_5 p_1^{(0,1)} p_2^{(0,1)} p_2^{(1,0)} p_5^{(1,0)} p_0^{(1,2,0,0,1)} v'_1 + \\
& 2 u'_{12} (u'_{21})^2 u'_{42} (v'_2)^2 v'_4 p_1^{(0,1)} p_4^{(0,1)} (p_2^{(1,0)})^2 p_0^{(1,2,0,1,0)} v'_1 + 4 u'_{11} u'_{21} u'_{22} u'_{42} (v'_2)^2 v'_4 p_2^{(0,1)} p_4^{(0,1)} p_1^{(1,0)} p_2^{(1,0)} p_0^{(1,2,0,1,0)} v'_1 + \\
& 2 u'_{11} (u'_{22})^2 u'_{41} (v'_2)^2 v'_4 (p_2^{(0,1)})^2 p_1^{(1,0)} p_4^{(1,0)} p_0^{(1,2,0,1,0)} v'_1 + 4 u'_{12} u'_{21} u'_{22} u'_{41} (v'_2)^2 v'_4 p_1^{(0,1)} p_2^{(0,1)} p_2^{(1,0)} p_4^{(1,0)} p_0^{(1,2,0,1,0)} v'_1 + \\
& 2 u'_{12} (u'_{21})^2 u'_{32} (v'_2)^2 v'_3 p_1^{(0,1)} p_3^{(0,1)} (p_2^{(1,0)})^2 p_0^{(1,2,1,0,0)} v'_1 + 4 u'_{11} u'_{21} u'_{22} u'_{32} (v'_2)^2 v'_3 p_2^{(0,1)} p_3^{(0,1)} p_1^{(1,0)} p_2^{(1,0)} p_0^{(1,2,1,0,0)} v'_1 + \\
& 2 u'_{11} (u'_{22})^2 u'_{31} (v'_2)^2 v'_3 (p_2^{(0,1)})^2 p_1^{(1,0)} p_3^{(1,0)} p_0^{(1,2,1,0,0)} v'_1 + 4 u'_{12} u'_{21} u'_{22} u'_{31} (v'_2)^2 v'_3 p_1^{(0,1)} p_2^{(0,1)} p_2^{(1,0)} p_3^{(1,0)} p_0^{(1,2,1,0,0)} v'_1 + \\
& 2 u'_{12} (u'_{21})^2 u'_{22} (v'_2)^3 p_1^{(0,1)} p_2^{(0,1)} (p_2^{(1,0)})^2 p_0^{(1,3,0,0,0)} v'_1 + 2 u'_{11} u'_{21} (u'_{22})^2 (v'_2)^3 (p_2^{(0,1)})^2 p_1^{(1,0)} p_2^{(1,0)} p_0^{(1,3,0,0,0)} v'_1 + \\
& 4 (u'_{11})^2 (u'_{12})^2 v_1^{(3)} (p_1^{(0,1)})^2 (p_1^{(1,0)})^2 p_0^{(2,0,0,0,0)} v'_1 + 3 (u'_{11})^2 u'_{12} v_1' p_1^{(0,1)} (p_1^{(1,0)})^2 p_0^{(2,0,0,0,0)} v'_1 + \\
& 3 (u'_{11})^2 (u'_{12})^2 v_1' p_1^{(0,2)} (p_1^{(1,0)})^2 p_0^{(2,0,0,0,0)} v'_1 + 3 (u'_{12})^2 u'_{11} v_1' (p_1^{(0,1)})^2 p_1^{(1,0)} p_0^{(2,0,0,0,0)} v'_1 + \\
& 12 (u'_{11})^2 (u'_{12})^2 v_1' p_1^{(0,1)} p_1^{(1,0)} p_1^{(1,1)} p_0^{(2,0,0,0,0)} v'_1 + 3 (u'_{11})^2 (u'_{12})^2 v_1' (p_1^{(0,1)})^2 p_1^{(2,0)} p_0^{(2,0,0,0,0)} v'_1 + \\
& 6 (u'_{11})^2 u'_{12} u'_{52} v_5' p_1^{(0,1)} p_5^{(0,1)} (p_1^{(1,0)})^2 p_0^{(2,0,0,0,1)} v'_1 + 6 u'_{11} (u'_{12})^2 u'_{51} v_5' p_1^{(0,1)} p_5^{(1,0)} p_0^{(2,0,0,0,1)} v'_1 + \\
& 6 (u'_{11})^2 u'_{12} u'_{42} v_4' p_1^{(0,1)} p_4^{(0,1)} (p_1^{(1,0)})^2 p_0^{(2,0,0,1,0)} v'_1 + 6 u'_{11} (u'_{12})^2 u'_{41} v_4' p_1^{(0,1)} p_4^{(1,0)} p_0^{(2,0,0,1,0)} v'_1 + \\
& 6 (u'_{11})^2 u'_{12} u'_{32} v_3' p_1^{(0,1)} p_3^{(0,1)} (p_1^{(1,0)})^2 p_0^{(2,0,1,0,0)} v'_1 + 6 u'_{11} (u'_{12})^2 u'_{31} v_3' p_1^{(0,1)} p_3^{(1,0)} p_0^{(2,0,1,0,0)} v'_1 + \\
& 6 (u'_{11})^2 u'_{12} u'_{22} v_2' p_1^{(0,1)} p_2^{(0,1)} (p_1^{(1,0)})^2 p_0^{(2,1,0,0,0)} v'_1 + 6 u'_{11} (u'_{12})^2 u'_{21} v_2' p_1^{(0,1)} p_2^{(1,0)} p_0^{(2,1,0,0,0)} v'_1 + \\
& (u'_{51})^2 (u'_{52})^2 v_5^{(4)} (p_5^{(0,1)})^2 (p_5^{(1,0)})^2 p_0^{(0,0,0,0,1)} + (u'_{51})^2 u'_{52} v_5^{(3)} p_5^{(0,1)} (p_5^{(1,0)})^2 p_0^{(0,0,0,0,1)} + (u'_{51})^2 (u'_{52})^2 v_5^{(3)} p_5^{(0,2)} (p_5^{(1,0)})^2 p_0^{(0,0,0,0,1)} + \\
& 2 (u'_{51})^2 (u'_{52})^2 v_5' (p_5^{(1,1)})^2 p_0^{(0,0,0,0,1)} + (u'_{52})^2 u'_{51} v_5^{(3)} (p_5^{(0,1)})^2 p_5^{(1,0)} p_0^{(0,0,0,0,1)} + u'_{51} u'_{52} v_5' p_5^{(0,1)} p_5^{(1,0)} p_0^{(0,0,0,0,1)} + \\
& (u'_{52})^2 u'_{51} v_5' p_5^{(0,2)} p_5^{(1,0)} p_0^{(0,0,0,0,1)} + v_5' u'_{51} u'_{52} p_5^{(1,1)} p_0^{(0,0,0,0,1)} + 2 (u'_{52})^2 u'_{51} v_5' p_5^{(0,1)} p_5^{(1,1)} p_0^{(0,0,0,0,1)} + \\
& 2 (u'_{51})^2 u'_{52} v_5' p_5^{(1,0)} p_5^{(1,1)} p_0^{(0,0,0,0,1)} + 4 (u'_{51})^2 (u'_{52})^2 v_5^{(3)} p_5^{(0,1)} p_5^{(1,0)} p_5^{(1,1)} p_0^{(0,0,0,0,1)} + (u'_{52})^2 v_5' u'_{51} p_5^{(1,2)} p_0^{(0,0,0,0,1)} + \\
& 2 (u'_{51})^2 (u'_{52})^2 v_5' p_5^{(1,0)} p_5^{(1,2)} p_0^{(0,0,0,0,1)} + (u'_{51})^2 (u'_{52})^2 v_5^{(3)} (p_5^{(0,1)})^2 p_5^{(2,0)} p_0^{(0,0,0,0,1)} + (u'_{51})^2 u'_{52} v_5' p_5^{(0,1)} p_5^{(2,0)} p_0^{(0,0,0,0,1)} + \\
& (u'_{51})^2 (u'_{52})^2 v_5' p_5^{(2,0)} p_5^{(2,0)} p_0^{(0,0,0,0,1)} + (u'_{51})^2 v_5' u'_{52} p_5^{(2,1)} p_0^{(0,0,0,0,1)} + 2 (u'_{51})^2 (u'_{52})^2 v_5' p_5^{(0,1)} p_5^{(2,1)} p_0^{(0,0,0,0,1)} + \\
& (u'_{51})^2 (u'_{52})^2 v_5' p_5^{(2,2)} p_0^{(0,0,0,0,1)} + 3 (u'_{51})^2 (u'_{52})^2 (v_5')^2 (p_5^{(0,1)})^2 (p_5^{(1,0)})^2 p_0^{(0,0,0,0,2)} + 4 (u'_{51})^2 (u'_{52})^2 v_5' v_5^{(3)} (p_5^{(0,1)})^2 (p_5^{(1,0)})^2 p_0^{(0,0,0,0,2)} + \\
& 3 (u'_{51})^2 v_5' u'_{52} v_5' p_5^{(0,1)} (p_5^{(1,0)})^2 p_0^{(0,0,0,0,2)} + 3 (u'_{51})^2 (u'_{52})^2 v_5' v_5^{(3)} p_5^{(0,2)} (p_5^{(1,0)})^2 p_0^{(0,0,0,0,2)} + 2 (u'_{51})^2 (u'_{52})^2 (v_5')^2 (p_5^{(1,1)})^2 p_0^{(0,0,0,0,2)} + \\
& 3 (u'_{52})^2 v_5' u'_{51} v_5' (p_5^{(0,1)})^2 p_5^{(1,0)} p_0^{(0,0,0,0,2)} + (v_5')^2 u'_{51} u'_{52} p_5^{(0,1)} p_5^{(1,0)} p_0^{(0,0,0,0,2)} + (u'_{52})^2 (v_5')^2 u'_{51} p_5^{(0,2)} p_5^{(1,0)} p_0^{(0,0,0,0,2)} + \\
& 2 (u'_{52})^2 (v_5')^2 u'_{51} p_5^{(0,1)} p_5^{(1,1)} p_0^{(0,0,0,0,2)} + 2 (u'_{51})^2 (v_5')^2 u'_{52} p_5^{(1,0)} p_5^{(1,1)} p_0^{(0,0,0,0,2)} + 12 (u'_{51})^2 (u'_{52})^2 v_5' v_5' p_5^{(0,1)} p_5^{(1,0)} p_5^{(1,1)} p_0^{(0,0,0,0,2)} +
\end{aligned}$$

$$\begin{aligned}
& 2 (u'_{51})^2 (u'_{52})^2 (v'_5)^2 p_5^{(1,0)} p_5^{(1,2)} p_0^{(0,0,0,2)} + 3 (u'_{51})^2 (u'_{52})^2 v'_5 v''_5 (p_5^{(0,1)})^2 p_5^{(2,0)} p_0^{(0,0,0,2)} + (u'_{51})^2 (v'_5)^2 u''_5 p_5^{(0,1)} p_5^{(2,0)} p_0^{(0,0,0,2)} + \\
& (u'_{51})^2 (u'_{52})^2 (v'_5)^2 p_5^{(0,2)} p_5^{(2,0)} p_0^{(0,0,0,2)} + 2 (u'_{51})^2 (u'_{52})^2 (v'_5)^2 p_5^{(0,1)} p_5^{(2,1)} p_0^{(0,0,0,2)} + 6 (u'_{51})^2 (u'_{52})^2 (v'_5)^2 v''_5 (p_5^{(0,1)})^2 (p_5^{(1,0)})^2 p_0^{(0,0,0,3)} + \\
& (u'_{51})^2 (v'_5)^3 u''_5 p_5^{(0,1)} (p_5^{(1,0)})^2 p_0^{(0,0,0,3)} + (u'_{51})^2 (u'_{52})^2 (v'_5)^3 p_5^{(0,2)} (p_5^{(1,0)})^2 p_0^{(0,0,0,3)} + (u'_{52})^2 (v'_5)^3 u''_5 (p_5^{(0,1)})^2 p_5^{(1,0)} p_0^{(0,0,0,3)} + \\
& 4 (u'_{51})^2 (u'_{52})^2 (v'_5)^3 p_5^{(0,1)} p_5^{(1,0)} p_5^{(1,1)} p_0^{(0,0,0,3)} + (u'_{51})^2 (u'_{52})^2 (v'_5)^3 (p_5^{(0,1)})^2 p_5^{(2,0)} p_0^{(0,0,0,3)} + \\
& (u'_{51})^2 (u'_{52})^2 (v'_5)^4 (p_5^{(0,1)})^2 (p_5^{(1,0)})^2 p_0^{(0,0,0,4)} + (u'_{41})^2 (u'_{42})^2 v_4^{(4)} (p_4^{(0,1)})^2 (p_4^{(1,0)})^2 p_0^{(0,0,0,1,0)} + (u'_{41})^2 u''_4 v_4^{(3)} p_4^{(0,1)} (p_4^{(1,0)})^2 p_0^{(0,0,0,1,0)} + \\
& (u'_{41})^2 (u'_{42})^2 v_4^{(3)} p_4^{(0,2)} (p_4^{(1,0)})^2 p_0^{(0,0,0,1,0)} + 2 (u'_{41})^2 (u'_{42})^2 v''_4 (p_4^{(1,1)})^2 p_0^{(0,0,0,1,0)} + (u'_{42})^2 u''_4 v_4^{(3)} (p_4^{(0,1)})^2 p_4^{(1,0)} p_0^{(0,0,0,1,0)} + \\
& u''_4 u''_4 v_4^{(0,1)} p_4^{(0,1)} p_4^{(1,0)} p_0^{(0,0,0,1,0)} + (u'_{42})^2 u''_4 v''_4 p_4^{(0,2)} p_4^{(1,0)} p_0^{(0,0,0,1,0)} + v_4 u''_4 u''_4 p_4^{(1,1)} p_0^{(0,0,0,1,0)} + \\
& 2 (u'_{42})^2 u''_4 v''_4 p_4^{(0,1)} p_4^{(1,1)} p_0^{(0,0,0,1,0)} + 2 (u'_{41})^2 u''_4 v''_4 p_4^{(1,0)} p_4^{(1,1)} p_0^{(0,0,0,1,0)} + 4 (u'_{41})^2 (u'_{42})^2 v_4^{(3)} p_4^{(0,1)} p_4^{(1,0)} p_4^{(1,1)} p_0^{(0,0,0,1,0)} + \\
& (u'_{42})^2 v_4 u''_4 p_4^{(1,2)} p_0^{(0,0,0,1,0)} + 2 (u'_{41})^2 (u'_{42})^2 v''_4 p_4^{(1,0)} p_4^{(1,2)} p_0^{(0,0,0,1,0)} + (u'_{41})^2 (u'_{42})^2 v_4^{(3)} (p_4^{(0,1)})^2 p_4^{(2,0)} p_0^{(0,0,0,1,0)} + \\
& (u'_{41})^2 u''_4 v''_4 p_4^{(0,1)} p_4^{(2,0)} p_0^{(0,0,0,1,0)} + (u'_{41})^2 (u'_{42})^2 v''_4 p_4^{(0,2)} p_4^{(2,0)} p_0^{(0,0,0,1,0)} + (u'_{41})^2 v_4 u''_4 p_4^{(2,1)} p_0^{(0,0,0,1,0)} + \\
& 2 (u'_{41})^2 (u'_{42})^2 v''_4 p_4^{(0,1)} p_4^{(2,1)} p_0^{(0,0,0,1,0)} + (u'_{41})^2 (u'_{42})^2 v_4 p_4^{(2,2)} p_0^{(0,0,0,1,0)} + (u'_{41})^2 (u'_{52})^2 v''_4 v''_5 (p_5^{(0,1)})^2 (p_4^{(1,0)})^2 p_0^{(0,0,0,1,1)} + \\
& (u'_{41})^2 v'_5 u''_5 v''_4 p_5^{(0,1)} (p_4^{(1,0)})^2 p_0^{(0,0,0,1,1)} + 2 (u'_{41})^2 u'_{42} u'_{52} v'_5 v_4^{(3)} p_4^{(0,1)} p_5^{(0,1)} (p_4^{(1,0)})^2 p_0^{(0,0,0,1,1)} + \\
& (u'_{41})^2 (u'_{52})^2 v'_5 v''_4 p_5^{(0,2)} (p_4^{(1,0)})^2 p_0^{(0,0,0,1,1)} + (u'_{42})^2 (u'_{51})^2 v''_4 v''_5 (p_4^{(0,1)})^2 (p_5^{(1,0)})^2 p_0^{(0,0,0,1,1)} + \\
& (u'_{51})^2 v_4 u''_4 v''_5 p_4^{(0,1)} (p_5^{(1,0)})^2 p_0^{(0,0,0,1,1)} + 2 u'_{42} (u'_{51})^2 u'_{52} v_4 v_5^{(3)} p_4^{(0,1)} p_5^{(0,1)} (p_5^{(1,0)})^2 p_0^{(0,0,0,1,1)} + \\
& (u'_{42})^2 (u'_{51})^2 v_4 v''_5 p_4^{(0,2)} (p_5^{(1,0)})^2 p_0^{(0,0,0,1,1)} + (u'_{52})^2 v_4 u''_4 v''_5 (p_5^{(0,1)})^2 p_4^{(1,0)} p_0^{(0,0,0,1,1)} + v_4 v_5 u''_4 u''_5 p_5^{(0,1)} p_4^{(1,0)} p_0^{(0,0,0,1,1)} + \\
& 2 u'_{42} u'_{52} v'_5 u''_4 v''_4 p_4^{(0,1)} p_5^{(0,1)} p_4^{(1,0)} p_0^{(0,0,0,1,1)} + (u'_{52})^2 v_4 v'_5 u''_4 p_5^{(0,2)} p_4^{(1,0)} p_0^{(0,0,0,1,1)} + (u'_{42})^2 v'_5 u''_4 v''_4 (p_4^{(0,1)})^2 p_5^{(1,0)} p_0^{(0,0,0,1,1)} + \\
& v_4 v_5 u''_4 u''_5 p_4^{(0,1)} p_5^{(1,0)} p_0^{(0,0,0,1,1)} + 2 u'_{42} u'_{52} v_4 u''_5 v''_5 p_4^{(0,1)} p_5^{(0,1)} p_5^{(1,0)} p_0^{(0,0,0,1,1)} + (u'_{42})^2 v_4 v'_5 u''_4 p_4^{(2,0)} p_5^{(1,0)} p_0^{(0,0,0,1,1)} + \\
& 2 u'_{41} (u'_{42})^2 u''_5 v'_5 v_4^{(3)} (p_4^{(0,1)})^2 p_4^{(1,0)} p_5^{(1,0)} p_0^{(0,0,0,1,1)} + 2 u'_{41} u'_{51} (u'_{52})^2 v_4 v_5^{(3)} (p_5^{(0,1)})^2 p_4^{(1,0)} p_5^{(1,0)} p_0^{(0,0,0,1,1)} + \\
& 2 u'_{41} u'_{51} v'_5 u''_4 v''_4 p_4^{(0,1)} p_4^{(1,0)} p_5^{(1,0)} p_0^{(0,0,0,1,1)} + 2 u'_{41} u'_{51} v_4 u''_5 v''_5 p_5^{(0,1)} p_4^{(1,0)} p_5^{(1,0)} p_0^{(0,0,0,1,1)} + \\
& 4 u'_{41} u'_{42} u'_{51} u'_{52} v''_4 v''_5 p_4^{(0,1)} p_5^{(0,1)} p_4^{(1,0)} p_5^{(1,0)} p_0^{(0,0,0,1,1)} + 2 u'_{41} (u'_{42})^2 u'_{51} v'_5 v''_4 p_4^{(0,2)} p_4^{(1,0)} p_5^{(1,0)} p_0^{(0,0,0,1,1)} + \\
& 2 u'_{41} u'_{51} (u'_{52})^2 v_4 v''_5 p_5^{(0,2)} p_4^{(1,0)} p_5^{(1,0)} p_0^{(0,0,0,1,1)} + 2 u'_{42} u'_{52} v_4 v'_5 u''_4 p_5^{(0,1)} p_4^{(1,1)} p_0^{(0,0,0,1,1)} + \\
& 4 (u'_{41})^2 u'_{42} u'_{52} v'_5 v''_4 p_5^{(0,1)} p_4^{(1,0)} p_4^{(1,1)} p_0^{(0,0,0,1,1)} + 2 u'_{41} u'_{51} v_4 v''_4 u''_5 p_5^{(0,1)} p_4^{(1,1)} p_0^{(0,0,0,1,1)} + \\
& 4 u'_{41} (u'_{42})^2 u'_{51} v'_5 v''_4 p_4^{(0,1)} p_5^{(1,0)} p_4^{(1,1)} p_0^{(0,0,0,1,1)} + 4 u'_{41} u'_{42} u'_{51} u'_{52} v_4 v''_5 p_5^{(0,1)} p_5^{(1,0)} p_4^{(1,1)} p_0^{(0,0,0,1,1)} + \\
& 2 u'_{42} u'_{52} v_4 v''_5 u''_4 p_4^{(0,1)} p_5^{(1,1)} p_0^{(0,0,0,1,1)} + 2 u'_{41} u'_{51} v_4 v''_5 u''_5 p_4^{(1,0)} p_5^{(1,1)} p_0^{(0,0,0,1,1)} + 4 u'_{41} u'_{42} u'_{51} u'_{52} v'_5 v''_4 p_4^{(0,1)} p_4^{(1,0)} p_5^{(1,1)} p_0^{(0,0,0,1,1)} + \\
& 4 u'_{41} u'_{51} (u'_{52})^2 v_4 v''_5 p_5^{(0,1)} p_4^{(1,0)} p_5^{(1,1)} p_0^{(0,0,0,1,1)} + 4 u'_{42} (u'_{51})^2 u'_{52} v_4 v''_5 p_4^{(0,1)} p_5^{(1,0)} p_5^{(1,1)} p_0^{(0,0,0,1,1)} + \\
& 4 u'_{41} u'_{42} u'_{51} u'_{52} v_4 v''_5 p_4^{(1,1)} p_5^{(1,1)} p_0^{(0,0,0,1,1)} + 2 u'_{41} (u'_{42})^2 u'_{51} v_4 v''_5 p_5^{(1,0)} p_4^{(1,2)} p_0^{(0,0,0,1,1)} + 2 u'_{41} u'_{51} (u'_{52})^2 v_4 v'_5 p_4^{(1,0)} p_5^{(1,2)} p_0^{(0,0,0,1,1)} + \\
& (u'_{41})^2 (u'_{52})^2 v_4 v''_5 (p_5^{(0,1)})^2 p_4^{(2,0)} p_0^{(0,0,0,1,1)} + (u'_{41})^2 v_4 v'_5 u''_5 p_5^{(0,1)} p_4^{(2,0)} p_0^{(0,0,0,1,1)} + 2 (u'_{41})^2 u'_{42} u'_{52} v'_5 v''_4 p_4^{(0,1)} p_5^{(0,1)} p_4^{(2,0)} p_0^{(0,0,0,1,1)} + \\
& (u'_{41})^2 (u'_{52})^2 v_4 v''_5 p_5^{(0,2)} p_4^{(2,0)} p_0^{(0,0,0,1,1)} + (u'_{42})^2 (u'_{51})^2 v'_5 v''_4 (p_4^{(0,1)})^2 p_5^{(2,0)} p_0^{(0,0,0,1,1)} + (u'_{51})^2 v_4 v'_5 u''_4 p_4^{(0,1)} p_5^{(2,0)} p_0^{(0,0,0,1,1)} + \\
& 2 u'_{42} (u'_{51})^2 u'_{52} v_4 v''_5 p_4^{(0,1)} p_5^{(0,1)} p_5^{(2,0)} p_0^{(0,0,0,1,1)} + (u'_{42})^2 (u'_{51})^2 v_4 v'_5 p_4^{(0,2)} p_5^{(2,0)} p_0^{(0,0,0,1,1)} + 2 (u'_{41})^2 u'_{42} u'_{52} v_4 v'_5 p_5^{(0,1)} p_4^{(1,0)} p_0^{(0,0,0,1,1)} + \\
& 2 u'_{42} (u'_{51})^2 u'_{52} v_4 v'_5 p_4^{(0,1)} p_5^{(2,1)} p_0^{(0,0,0,1,1)} + (u'_{41})^2 (u'_{52})^2 (v'_5)^2 v''_4 (p_5^{(0,1)})^2 (p_4^{(1,0)})^2 p_0^{(0,0,0,1,2)} + \\
& (u'_{42})^2 (u'_{51})^2 (v'_5)^2 v''_4 (p_4^{(0,1)})^2 (p_5^{(1,0)})^2 p_0^{(0,0,0,1,2)} + (u'_{51})^2 v_4 (v'_5)^2 u''_4 p_4^{(0,1)} (p_5^{(1,0)})^2 p_0^{(0,0,0,1,2)} + \\
& 6 u'_{42} (u'_{51})^2 u'_{52} v_4 v'_5 v''_5 (p_4^{(0,1)}) p_5^{(0,1)} (p_5^{(1,0)})^2 p_0^{(0,0,0,1,2)} + (u'_{42})^2 (u'_{51})^2 v_4 (v'_5)^2 p_4^{(0,2)} (p_5^{(1,0)})^2 p_0^{(0,0,0,1,2)} + \\
& (u'_{52})^2 v_4 (v'_5)^2 u''_4 (p_5^{(0,1)})^2 p_4^{(1,0)} p_0^{(0,0,0,1,2)} + 2 u'_{42} u'_{52} v_4 (v'_5)^2 u''_5 p_4^{(0,1)} p_5^{(0,1)} p_5^{(1,0)} p_0^{(0,0,0,1,2)} + \\
& 6 u'_{41} u'_{51} (u'_{52})^2 v_4 v'_5 v''_5 (p_5^{(0,1)})^2 p_4^{(1,0)} p_5^{(1,0)} p_0^{(0,0,0,1,2)} + 2 u'_{41} u'_{51} v_4 (v'_5)^2 u''_5 p_5^{(0,1)} p_4^{(1,0)} p_5^{(1,0)} p_0^{(0,0,0,1,2)} + \\
& 4 u'_{41} u'_{42} u'_{51} u'_{52} (v'_5)^2 v''_4 p_4^{(0,1)} p_5^{(0,1)} p_4^{(1,0)} p_5^{(1,0)} p_0^{(0,0,0,1,2)} + 2 u'_{41} u'_{51} (u'_{52})^2 v_4 (v'_5)^2 p_5^{(0,2)} p_4^{(1,0)} p_5^{(1,0)} p_0^{(0,0,0,1,2)} + \\
& 4 u'_{41} u'_{42} u'_{51} u'_{52} v_4 (v'_5)^2 p_5^{(0,1)} p_5^{(1,0)} p_4^{(1,1)} p_0^{(0,0,0,1,2)} + 4 u'_{41} u'_{51} (u'_{52})^2 v_4 (v'_5)^2 p_5^{(0,1)} p_4^{(1,0)} p_5^{(1,1)} p_0^{(0,0,0,1,2)} + \\
& 4 u'_{42} (u'_{51})^2 u'_{52} v_4 (v'_5)^2 p_4^{(0,1)} p_5^{(1,0)} p_5^{(1,1)} p_0^{(0,0,0,1,2)} + (u'_{41})^2 (u'_{52})^2 v_4 (v'_5)^2 (p_5^{(0,1)})^2 p_4^{(2,0)} p_0^{(0,0,0,1,2)} + \\
& 2 u'_{42} (u'_{51})^2 u'_{52} v_4 (v'_5)^2 p_4^{(0,1)} p_5^{(0,1)} p_5^{(2,0)} p_0^{(0,0,0,1,2)} + 2 u'_{42} (u'_{51})^2 u'_{52} v_4 (v'_5)^3 p_4^{(0,1)} p_5^{(0,1)} (p_5^{(1,0)})^2 p_0^{(0,0,0,1,3)} + \\
& 2 u'_{41} u'_{51} (u'_{52})^2 v_4 (v'_5)^3 (p_5^{(0,1)})^2 p_4^{(1,0)} p_5^{(1,0)} p_0^{(0,0,0,1,3)} + 3 (u'_{41})^2 (u'_{42})^2 (v'_4)^2 (p_4^{(0,1)})^2 (p_4^{(1,0)})^2 p_0^{(0,0,0,2,0)} + \\
& 4 (u'_{41})^2 (u'_{42})^2 v_4 v_4^{(3)} (p_4^{(0,1)})^2 (p_4^{(1,0)})^2 p_0^{(0,0,0,2,0)} + 3 (u'_{41})^2 v_4 u''_4 v''_4 p_4^{(0,1)} (p_4^{(1,0)})^2 p_0^{(0,0,0,2,0)} + \\
& 3 (u'_{41})^2 (u'_{42})^2 (u'_{42})^2 v_4 v''_4 p_4^{(0,2)} (p_4^{(1,0)})^2 p_0^{(0,0,0,2,0)} + 2 (u'_{41})^2 (u'_{42})^2 (v'_4)^2 (p_4^{(1,1)})^2 p_0^{(0,0,0,2,0)} + 3 (u'_{42})^2 v_4 u''_4 v''_4 (p_4^{(0,1)})^2 p_4^{(1,0)} p_0^{(0,0,0,2,0)} + \\
& (v'_4)^2 u''_4 u''_4 p_4^{(0,1)} p_4^{(1,0)} p_0^{(0,0,0,2,0)} + (u'_{42})^2 (v'_4)^2 u''_4 p_4^{(0,2)} p_4^{(1,0)} p_0^{(0,0,0,2,0)} + 2 (u'_{42})^2 (v'_4)^2 u''_4 p_4^{(0,1)} p_4^{(1,1)} p_0^{(0,0,0,2,0)} + \\
& 2 (u'_{41})^2 (v'_4)^2 u''_4 p_4^{(1,0)} p_4^{(1,1)} p_0^{(0,0,0,2,0)} + 12 (u'_{41})^2 (u'_{42})^2 v_4 v''_4 p_4^{(0,1)} p_4^{(1,0)} p_4^{(1,1)} p_0^{(0,0,0,2,0)} + 2 (u'_{41})^2 (u'_{42})^2 (v'_4)^2 p_4^{(1,0)} p_4^{(1,2)} p_0^{(0,0,0,2,0)} + \\
& 3 (u'_{41})^2 (u'_{42})^2 v_4 v''_4 (p_4^{(0,1)})^2 p_4^{(2,0)} p_0^{(0,0,0,2,0)} + (u'_{41})^2 (v'_4)^2 u''_4 p_4^{(0,1)} p_4^{(2,0)} p_0^{(0,0,0,2,0)} + (u'_{41})^2 (u'_{42})^2 (v'_4)^2 p_4^{(0,2)} p_4^{(2,0)} p_0^{(0,0,0,2,0)} +
\end{aligned}$$

$$\begin{aligned}
& 2 (u'_{41})^2 (u'_{42})^2 (v'_4)^2 p_4^{(0,1)} p_4^{(2,1)} p_0^{(0,0,0,2,0)} + (u'_{41})^2 (u'_{52})^2 (v'_4)^2 v'_5 (p_5^{(0,1)})^2 (p_4^{(1,0)})^2 p_0^{(0,0,0,2,1)} + (u'_{41})^2 (v'_4)^2 v'_5 u'_{52} p_5^{(0,1)} (p_4^{(1,0)})^2 p_0^{(0,0,0,2,1)} + \\
& 6 (u'_{41})^2 u'_{42} u'_{52} v'_4 v'_5 v'_4 p_4^{(0,1)} p_5^{(0,1)} (p_4^{(1,0)})^2 p_0^{(0,0,0,2,1)} + (u'_{41})^2 (u'_{52})^2 (v'_4)^2 v'_5 p_5^{(0,2)} (p_4^{(1,0)})^2 p_0^{(0,0,0,2,1)} + \\
& (u'_{42})^2 (u'_{51})^2 (v'_4)^2 v'_5 (p_4^{(0,1)})^2 (p_5^{(1,0)})^2 p_0^{(0,0,0,2,1)} + 2 u'_{42} u'_{52} (v'_4)^2 v'_5 u'_{41} p_4^{(0,1)} p_5^{(0,1)} p_4^{(1,0)} p_0^{(0,0,0,2,1)} + \\
& (u'_{42})^2 (v'_4)^2 v'_5 u'_{51} (p_4^{(0,1)})^2 p_5^{(1,0)} p_0^{(0,0,0,2,1)} + 6 u'_{41} (u'_{42})^2 u'_{51} v'_4 v'_5 v'_4 (p_4^{(0,1)})^2 p_4^{(1,0)} p_5^{(1,0)} p_0^{(0,0,0,2,1)} + \\
& 2 u'_{41} u'_{51} (v'_4)^2 v'_5 u'_{42} p_4^{(0,1)} p_4^{(1,0)} p_5^{(1,0)} p_0^{(0,0,0,2,1)} + 4 u'_{41} u'_{42} u'_{51} u'_{52} (v'_4)^2 v'_5 p_4^{(0,1)} p_5^{(0,1)} p_4^{(1,0)} p_5^{(1,0)} p_0^{(0,0,0,2,1)} + \\
& 2 u'_{41} (u'_{42})^2 u'_{51} (v'_4)^2 v'_5 p_4^{(0,2)} p_4^{(1,0)} p_5^{(1,0)} p_0^{(0,0,0,2,1)} + 4 (u'_{41})^2 u'_{42} u'_{52} (v'_4)^2 v'_5 p_5^{(0,1)} p_4^{(1,0)} p_4^{(1,1)} p_0^{(0,0,0,2,1)} + \\
& 4 u'_{41} (u'_{42})^2 u'_{51} (v'_4)^2 v'_5 p_4^{(0,1)} p_5^{(1,0)} p_4^{(1,1)} p_0^{(0,0,0,2,1)} + 4 u'_{41} u'_{42} u'_{51} u'_{52} (v'_4)^2 v'_5 p_4^{(0,1)} p_4^{(1,0)} p_5^{(1,1)} p_0^{(0,0,0,2,1)} + \\
& 2 (u'_{41})^2 u'_{42} u'_{52} (v'_4)^2 v'_5 p_4^{(0,1)} p_5^{(0,1)} p_4^{(2,0)} p_0^{(0,0,0,2,1)} + (u'_{42})^2 (u'_{51})^2 (v'_4)^2 v'_5 (p_4^{(0,1)})^2 p_5^{(2,0)} p_0^{(0,0,0,2,1)} + \\
& (u'_{41})^2 (u'_{52})^2 (v'_4)^2 (v'_5)^2 (p_5^{(0,1)})^2 (p_4^{(1,0)})^2 p_0^{(0,0,0,2,2)} + (u'_{42})^2 (u'_{51})^2 (v'_4)^2 (v'_5)^2 (p_4^{(0,1)})^2 (p_5^{(1,0)})^2 p_0^{(0,0,0,2,2)} + \\
& 4 u'_{41} u'_{42} u'_{51} u'_{52} (v'_4)^2 (v'_5)^2 p_4^{(0,1)} p_5^{(0,1)} p_4^{(1,0)} p_5^{(1,0)} p_0^{(0,0,0,2,2)} + 6 (u'_{41})^2 (u'_{42})^2 (v'_4)^2 v'_4 (p_4^{(0,1)})^2 (p_4^{(1,0)})^2 p_0^{(0,0,0,3,0)} + \\
& (u'_{41})^2 (v'_4)^3 u'_{42} p_4^{(0,1)} (p_4^{(1,0)})^2 p_0^{(0,0,0,3,0)} + (u'_{41})^2 (u'_{42})^2 (v'_4)^3 p_4^{(0,2)} (p_4^{(1,0)})^2 p_0^{(0,0,0,3,0)} + (u'_{42})^2 (v'_4)^3 u'_{41} (p_4^{(0,1)})^2 p_4^{(1,0)} p_0^{(0,0,0,3,0)} + \\
& 4 (u'_{41})^2 (u'_{42})^2 (v'_4)^3 p_4^{(0,1)} p_4^{(1,1)} p_4^{(1,1)} p_0^{(0,0,0,3,0)} + (u'_{41})^2 (u'_{42})^2 (v'_4)^3 (p_4^{(0,1)})^2 p_4^{(2,0)} p_0^{(0,0,0,3,0)} + \\
& 2 (u'_{41})^2 u'_{42} u'_{52} (v'_4)^3 v'_5 p_4^{(0,1)} p_5^{(0,1)} (p_4^{(1,0)})^2 p_0^{(0,0,0,3,1)} + 2 u'_{41} (u'_{42})^2 u'_{51} (v'_4)^3 v'_5 (p_4^{(0,1)})^2 p_4^{(1,0)} p_5^{(1,0)} p_0^{(0,0,0,3,1)} + \\
& (u'_{41})^2 (u'_{42})^2 (v'_4)^4 (p_4^{(0,1)})^2 (p_4^{(1,0)})^2 p_0^{(0,0,0,4,0)} + (u'_{31})^2 (u'_{32})^2 v_3^{(4)} (p_3^{(0,1)})^2 (p_3^{(1,0)})^2 p_0^{(0,0,1,0,0)} + (u'_{31})^2 u'_{32} v_3^{(3)} p_3^{(0,1)} (p_3^{(1,0)})^2 p_0^{(0,0,1,0,0)} + \\
& (u'_{31})^2 (u'_{32})^2 v_3^{(3)} p_3^{(0,2)} (p_3^{(1,0)})^2 p_0^{(0,0,1,0,0)} + 2 (u'_{31})^2 (u'_{32})^2 v_3^{(3)} (p_3^{(1,1)})^2 p_0^{(0,0,1,0,0)} + (u'_{32})^2 u'_{31} v_3^{(3)} (p_3^{(0,1)})^2 p_3^{(1,0)} p_0^{(0,0,1,0,0)} + \\
& u'_{31} u'_{32} v_3^{(3)} p_3^{(0,1)} p_3^{(1,0)} p_0^{(0,0,1,0,0)} + (u'_{32})^2 u'_{31} v_3^{(2)} p_3^{(0,2)} p_3^{(1,0)} p_0^{(0,0,1,0,0)} + v_3 u'_{31} u'_{32} p_3^{(1,1)} p_0^{(0,0,1,0,0)} + \\
& 2 (u'_{32})^2 u'_{31} v_3^{(0,1)} p_3^{(1,1)} p_0^{(0,0,1,0,0)} + 2 (u'_{31})^2 u'_{32} v_3^{(3)} p_3^{(1,0)} p_3^{(1,1)} p_0^{(0,0,1,0,0)} + 4 (u'_{31})^2 (u'_{32})^2 v_3^{(3)} p_3^{(0,1)} p_3^{(1,0)} p_3^{(1,1)} p_0^{(0,0,1,0,0)} + \\
& (u'_{32})^2 v_3 u'_{31} p_3^{(1,2)} p_0^{(0,0,1,0,0)} + 2 (u'_{31})^2 (u'_{32})^2 v_3^{(3)} p_3^{(1,0)} p_3^{(1,2)} p_0^{(0,0,1,0,0)} + (u'_{31})^2 (u'_{32})^2 v_3^{(3)} (p_3^{(0,1)})^2 p_3^{(2,0)} p_0^{(0,0,1,0,0)} + \\
& (u'_{31})^2 u'_{32} v_3^{(0,1)} p_3^{(2,0)} p_0^{(0,0,1,0,0)} + (u'_{31})^2 (u'_{32})^2 v_3^{(2)} p_3^{(0,2)} p_0^{(0,0,1,0,0)} + (u'_{31})^2 v_3 u'_{32} p_3^{(2,1)} p_0^{(0,0,1,0,0)} + \\
& 2 (u'_{31})^2 (u'_{32})^2 v_3^{(0,1)} p_3^{(2,1)} p_0^{(0,0,1,0,0)} + (u'_{31})^2 (u'_{32})^2 v_3^{(2,2)} p_0^{(0,0,1,0,0)} + (u'_{31})^2 (u'_{32})^2 v_3 v'_5 (p_5^{(0,1)})^2 (p_3^{(1,0)})^2 p_0^{(0,0,1,0,1)} + \\
& (u'_{31})^2 v'_5 u'_{32} v'_5 p_5^{(0,1)} (p_3^{(1,0)})^2 p_0^{(0,0,1,0,1)} + 2 (u'_{31})^2 u'_{32} u'_{52} v'_5 v_3^{(3)} p_3^{(0,1)} p_5^{(0,1)} (p_3^{(1,0)})^2 p_0^{(0,0,1,0,1)} + \\
& (u'_{31})^2 (u'_{52})^2 v'_5 v'_5 p_5^{(0,2)} (p_3^{(1,0)})^2 p_0^{(0,0,1,0,1)} + (u'_{32})^2 (u'_{51})^2 v'_5 v'_5 (p_3^{(0,1)})^2 (p_5^{(1,0)})^2 p_0^{(0,0,1,0,1)} + \\
& (u'_{51})^2 v'_5 u'_{32} v'_5 p_3^{(0,1)} (p_5^{(1,0)})^2 p_0^{(0,0,1,0,1)} + 2 u'_{32} (u'_{51})^2 u'_{52} v'_5 v_3^{(3)} p_3^{(0,1)} p_5^{(0,1)} (p_5^{(1,0)})^2 p_0^{(0,0,1,0,1)} + \\
& (u'_{32})^2 (u'_{51})^2 v'_5 v'_5 p_3^{(0,2)} (p_5^{(1,0)})^2 p_0^{(0,0,1,0,1)} + (u'_{52})^2 v'_5 u'_{31} v'_5 (p_5^{(0,1)})^2 p_3^{(1,0)} p_0^{(0,0,1,0,1)} + v'_5 v'_5 u'_{31} u'_{52} p_5^{(0,1)} p_3^{(1,0)} p_0^{(0,0,1,0,1)} + \\
& 2 u'_{32} u'_{52} v'_5 u'_{31} v'_5 p_3^{(0,1)} p_5^{(0,1)} p_0^{(0,0,1,0,1)} + (u'_{52})^2 v'_5 v'_5 u'_{31} p_5^{(0,2)} p_3^{(1,0)} p_0^{(0,0,1,0,1)} + (u'_{32})^2 v'_5 u'_{51} v'_5 (p_3^{(0,1)})^2 p_5^{(1,0)} p_0^{(0,0,1,0,1)} + \\
& v'_5 v'_5 u'_{32} u'_{51} p_3^{(0,1)} p_5^{(1,0)} p_0^{(0,0,1,0,1)} + 2 u'_{32} u'_{52} v'_5 u'_{51} v'_5 p_3^{(0,1)} p_5^{(0,1)} p_5^{(1,0)} p_0^{(0,0,1,0,1)} + (u'_{32})^2 v'_5 v'_5 u'_{51} p_3^{(0,2)} p_5^{(1,0)} p_0^{(0,0,1,0,1)} + \\
& 2 u'_{31} (u'_{32})^2 u'_{51} v'_5 v_3^{(3)} (p_3^{(0,1)})^2 p_3^{(1,0)} p_5^{(1,0)} p_0^{(0,0,1,0,1)} + 2 u'_{31} u'_{51} (u'_{52})^2 v'_5 v_3^{(3)} (p_5^{(0,1)})^2 p_3^{(1,0)} p_5^{(1,0)} p_0^{(0,0,1,0,1)} + \\
& 2 u'_{31} u'_{51} v'_5 u'_{32} v'_5 p_3^{(0,1)} p_3^{(1,0)} p_5^{(1,0)} p_0^{(0,0,1,0,1)} + 2 u'_{31} u'_{51} v'_5 u'_{52} v'_5 p_5^{(0,1)} p_3^{(1,0)} p_5^{(1,0)} p_0^{(0,0,1,0,1)} + \\
& 4 u'_{31} u'_{32} u'_{51} u'_{52} v'_5 v'_5 p_3^{(0,1)} p_5^{(0,1)} p_3^{(1,0)} p_5^{(1,0)} p_0^{(0,0,1,0,1)} + 2 u'_{31} (u'_{32})^2 u'_{51} v'_5 v'_5 p_3^{(0,2)} p_3^{(1,0)} p_5^{(1,0)} p_0^{(0,0,1,0,1)} + \\
& 2 u'_{31} u'_{51} (u'_{52})^2 v'_5 v'_5 p_5^{(0,2)} p_3^{(1,0)} p_5^{(1,0)} p_0^{(0,0,1,0,1)} + 2 u'_{32} u'_{52} v'_5 v'_5 u'_{31} p_5^{(0,1)} p_3^{(1,1)} p_0^{(0,0,1,0,1)} + \\
& 4 (u'_{31})^2 u'_{32} u'_{52} v'_5 v'_5 p_5^{(0,1)} p_3^{(1,1)} p_0^{(0,0,1,0,1)} + 2 u'_{31} u'_{51} v'_5 v'_5 u'_{32} p_5^{(1,0)} p_3^{(1,1)} p_0^{(0,0,1,0,1)} + \\
& 4 u'_{31} (u'_{32})^2 u'_{51} v'_5 v'_5 p_3^{(0,1)} p_5^{(1,0)} p_3^{(1,1)} p_0^{(0,0,1,0,1)} + 4 u'_{31} u'_{32} u'_{51} u'_{52} v'_5 v'_5 p_5^{(0,1)} p_3^{(1,1)} p_3^{(1,1)} p_0^{(0,0,1,0,1)} + \\
& 2 u'_{32} u'_{52} v'_5 v'_5 u'_{51} p_3^{(0,1)} p_5^{(1,1)} p_0^{(0,0,1,0,1)} + 2 u'_{31} u'_{51} v'_5 v'_5 u'_{52} p_3^{(1,0)} p_5^{(1,1)} p_0^{(0,0,1,0,1)} + 4 u'_{31} u'_{32} u'_{51} u'_{52} v'_5 v'_5 p_3^{(0,1)} p_3^{(1,0)} p_5^{(1,1)} p_0^{(0,0,1,0,1)} + \\
& 4 u'_{31} u'_{51} (u'_{52})^2 v'_5 v'_5 p_5^{(0,1)} p_3^{(1,1)} p_0^{(0,0,1,0,1)} + 4 u'_{32} (u'_{51})^2 u'_{52} v'_5 v'_5 p_3^{(0,1)} p_5^{(1,0)} p_5^{(1,1)} p_0^{(0,0,1,0,1)} + \\
& 4 u'_{31} u'_{32} u'_{51} u'_{52} v'_5 v'_5 p_3^{(1,1)} p_5^{(1,1)} p_0^{(0,0,1,0,1)} + 2 u'_{31} (u'_{32})^2 u'_{51} v'_5 v'_5 p_5^{(1,0)} p_3^{(1,2)} p_0^{(0,0,1,0,1)} + 2 u'_{31} u'_{51} (u'_{52})^2 v'_5 v'_5 p_3^{(1,0)} p_5^{(1,2)} p_0^{(0,0,1,0,1)} + \\
& (u'_{31})^2 (u'_{52})^2 v'_5 v'_5 (p_5^{(0,1)})^2 p_3^{(2,0)} p_0^{(0,0,1,0,1)} + (u'_{31})^2 v'_5 v'_5 u'_{52} p_5^{(0,1)} p_3^{(2,0)} p_0^{(0,0,1,0,1)} + 2 (u'_{31})^2 u'_{32} u'_{52} v'_5 v'_5 p_3^{(0,1)} p_5^{(0,1)} p_3^{(2,0)} p_0^{(0,0,1,0,1)} + \\
& (u'_{31})^2 (u'_{52})^2 v'_5 v'_5 p_5^{(0,2)} p_3^{(2,0)} p_0^{(0,0,1,0,1)} + (u'_{32})^2 (u'_{51})^2 v'_5 v'_5 (p_3^{(0,1)})^2 p_5^{(2,0)} p_0^{(0,0,1,0,1)} + (u'_{51})^2 v'_5 v'_5 u'_{32} p_3^{(0,1)} p_5^{(2,0)} p_0^{(0,0,1,0,1)} + \\
& 2 u'_{32} (u'_{51})^2 u'_{52} v'_5 v'_5 p_3^{(0,1)} p_5^{(2,0)} p_0^{(0,0,1,0,1)} + (u'_{32})^2 (u'_{51})^2 v'_5 v'_5 p_3^{(0,2)} p_5^{(2,0)} p_0^{(0,0,1,0,1)} + 2 (u'_{31})^2 u'_{32} u'_{52} v'_5 v'_5 p_5^{(0,1)} p_3^{(2,1)} p_0^{(0,0,1,0,1)} + \\
& 2 u'_{32} (u'_{51})^2 u'_{52} v'_5 v'_5 p_3^{(0,1)} p_5^{(2,1)} p_0^{(0,0,1,0,1)} + (u'_{31})^2 (u'_{52})^2 (v'_5)^2 v'_5 (p_5^{(0,1)})^2 (p_3^{(1,0)})^2 p_0^{(0,0,1,0,2)} + \\
& (u'_{32})^2 (u'_{51})^2 (v'_5)^2 v'_5 (p_3^{(0,1)})^2 (p_5^{(1,0)})^2 p_0^{(0,0,1,0,2)} + (u'_{51})^2 v'_5 (v'_5)^2 u'_{32} p_3^{(0,1)} (p_5^{(1,0)})^2 p_0^{(0,0,1,0,2)} + \\
& 6 u'_{32} (u'_{51})^2 u'_{52} v'_5 v'_5 v'_5 p_3^{(0,1)} p_5^{(0,1)} (p_5^{(1,0)})^2 p_0^{(0,0,1,0,2)} + (u'_{32})^2 (u'_{51})^2 v'_5 (v'_5)^2 p_3^{(0,2)} (p_5^{(1,0)})^2 p_0^{(0,0,1,0,2)} + \\
& (u'_{52})^2 v'_5 (v'_5)^2 u'_{31} (p_5^{(0,1)})^2 p_3^{(1,0)} p_0^{(0,0,1,0,2)} + 2 u'_{32} u'_{52} v'_5 (v'_5)^2 u'_{51} p_3^{(0,1)} p_5^{(0,1)} p_5^{(1,0)} p_0^{(0,0,1,0,2)} + \\
& 6 u'_{31} u'_{51} (u'_{52})^2 v'_5 v'_5 v'_5 (p_5^{(0,1)})^2 p_3^{(1,0)} p_5^{(1,0)} p_0^{(0,0,1,0,2)} + 2 u'_{31} u'_{51} v'_5 (v'_5)^2 u'_{52} p_5^{(0,1)} p_3^{(1,0)} p_5^{(1,0)} p_0^{(0,0,1,0,2)} + \\
& 4 u'_{31} u'_{32} u'_{51} u'_{52} (v'_5)^2 v'_5 p_3^{(0,1)} p_5^{(0,1)} p_3^{(1,0)} p_5^{(1,0)} p_0^{(0,0,1,0,2)} + 2 u'_{31} u'_{51} (u'_{52})^2 v'_5 (v'_5)^2 p_5^{(0,2)} p_3^{(1,0)} p_5^{(1,0)} p_0^{(0,0,1,0,2)} + \\
& 4 u'_{31} u'_{32} u'_{51} u'_{52} v'_5 (v'_5)^2 p_5^{(0,1)} p_3^{(1,0)} p_5^{(1,1)} p_0^{(0,0,1,0,2)} +
\end{aligned}$$

$$\begin{aligned}
& 4 u'_{32} (u'_{51})^2 u'_{52} v'_3 (v'_5)^2 p_3^{(0,1)} p_5^{(1,0)} p_5^{(0,0,1,0,2)} + (u'_{31})^2 (u'_{52})^2 v'_3 (v'_5)^2 (p_5^{(0,1)})^2 p_3^{(2,0)} p_0^{(0,0,1,0,2)} + \\
& 2 u'_{32} (u'_{51})^2 u'_{52} v'_3 (v'_5)^2 p_3^{(0,1)} p_5^{(0,1)} p_5^{(2,0)} p_0^{(0,0,1,0,2)} + 2 u'_{32} (u'_{51})^2 u'_{52} v'_3 (v'_5)^3 p_3^{(0,1)} p_5^{(0,1)} (p_5^{(1,0)})^2 p_0^{(0,0,1,0,3)} + \\
& 2 u'_{31} u'_{51} (u'_{52})^2 v'_3 (v'_5)^3 (p_5^{(0,1)})^2 p_3^{(1,0)} p_5^{(1,0)} p_0^{(0,0,1,0,3)} + (u'_{31})^2 (u'_{42})^2 v'_3 v'_4 (p_4^{(0,1)})^2 (p_3^{(1,0)})^2 p_0^{(0,0,1,1,0)} + \\
& (u'_{31})^2 v'_4 u'_{42} v'_3 p_4^{(0,1)} (p_3^{(1,0)})^2 p_0^{(0,0,1,1,0)} + 2 (u'_{31})^2 u'_{32} u'_{42} v'_4 v'_3 p_3^{(0,1)} p_4^{(0,1)} (p_3^{(1,0)})^2 p_0^{(0,0,1,1,0)} + \\
& (u'_{31})^2 (u'_{42})^2 v'_4 v'_3 p_4^{(0,2)} (p_3^{(1,0)})^2 p_0^{(0,0,1,1,0)} + (u'_{32})^2 (u'_{41})^2 v'_3 v'_4 (p_3^{(0,1)})^2 (p_4^{(1,0)})^2 p_0^{(0,0,1,1,0)} + \\
& (u'_{41})^2 v'_3 u'_{32} v'_4 p_3^{(0,1)} (p_4^{(1,0)})^2 p_0^{(0,0,1,1,0)} + 2 u'_{32} (u'_{41})^2 u'_{42} v'_3 v'_4 p_3^{(0,1)} p_4^{(0,1)} (p_4^{(1,0)})^2 p_0^{(0,0,1,1,0)} + \\
& (u'_{32})^2 (u'_{41})^2 v'_3 v'_4 p_3^{(0,2)} (p_4^{(1,0)})^2 p_0^{(0,0,1,1,0)} + (u'_{42})^2 v'_3 u'_{31} v'_4 (p_4^{(0,1)})^2 p_3^{(1,0)} p_0^{(0,0,1,1,0)} + v'_3 v'_4 u'_{31} u'_{42} p_4^{(0,1)} p_3^{(1,0)} p_0^{(0,0,1,1,0)} + \\
& 2 u'_{32} u'_{42} v'_4 u'_{31} v'_3 p_3^{(0,1)} p_4^{(0,1)} p_3^{(1,0)} p_0^{(0,0,1,1,0)} + (u'_{42})^2 v'_3 v'_4 u'_{31} p_4^{(0,2)} p_3^{(1,0)} p_0^{(0,0,1,1,0)} + (u'_{32})^2 v'_4 u'_{41} v'_3 (p_3^{(0,1)})^2 p_4^{(1,0)} p_0^{(0,0,1,1,0)} + \\
& v'_3 v'_4 u'_{32} u'_{41} p_3^{(0,1)} p_4^{(1,0)} p_0^{(0,0,1,1,0)} + 2 u'_{32} u'_{42} v'_3 u'_{41} v'_4 p_3^{(0,1)} p_4^{(0,1)} p_4^{(1,0)} p_0^{(0,0,1,1,0)} + (u'_{32})^2 v'_3 v'_4 u'_{41} p_3^{(0,2)} p_4^{(1,0)} p_0^{(0,0,1,1,0)} + \\
& 2 u'_{31} (u'_{32})^2 u'_{41} v'_4 v'_3 (p_3^{(0,1)})^2 p_3^{(1,0)} p_4^{(1,0)} p_0^{(0,0,1,1,0)} + 2 u'_{31} u'_{41} (u'_{42})^2 v'_3 v'_4 (p_4^{(0,1)})^2 p_3^{(1,0)} p_4^{(1,0)} p_0^{(0,0,1,1,0)} + \\
& 2 u'_{31} u'_{41} v'_4 u'_{32} v'_3 p_3^{(1,0)} p_3^{(1,0)} p_4^{(1,0)} p_0^{(0,0,1,1,0)} + 2 u'_{31} u'_{41} v'_3 u'_{42} v'_4 p_4^{(0,1)} p_3^{(1,0)} p_4^{(1,0)} p_0^{(0,0,1,1,0)} + \\
& 4 u'_{31} u'_{32} u'_{41} u'_{42} v'_3 v'_4 p_3^{(0,1)} p_4^{(1,0)} p_3^{(1,0)} p_4^{(1,0)} p_0^{(0,0,1,1,0)} + 2 u'_{31} (u'_{32})^2 u'_{41} v'_4 v'_3 p_3^{(0,2)} p_3^{(1,0)} p_4^{(1,0)} p_0^{(0,0,1,1,0)} + \\
& 2 u'_{31} u'_{41} (u'_{42})^2 v'_3 v'_4 p_4^{(0,2)} p_3^{(1,0)} p_4^{(1,0)} p_0^{(0,0,1,1,0)} + 2 u'_{32} u'_{42} v'_3 v'_4 u'_{31} p_3^{(0,1)} p_3^{(1,1)} p_0^{(0,0,1,1,0)} + \\
& 4 (u'_{31})^2 u'_{32} u'_{42} v'_4 v'_3 p_4^{(0,1)} p_3^{(1,0)} p_3^{(1,1)} p_0^{(0,0,1,1,0)} + 2 u'_{31} u'_{41} v'_3 v'_4 u'_{32} p_4^{(1,0)} p_3^{(1,1)} p_0^{(0,0,1,1,0)} + \\
& 4 u'_{31} (u'_{32})^2 u'_{41} v'_4 v'_3 p_3^{(0,1)} p_4^{(1,0)} p_3^{(1,1)} p_0^{(0,0,1,1,0)} + 4 u'_{31} u'_{32} u'_{41} u'_{42} v'_3 v'_4 p_4^{(0,1)} p_3^{(1,0)} p_3^{(1,1)} p_0^{(0,0,1,1,0)} + \\
& 2 u'_{32} u'_{42} v'_3 v'_4 u'_{41} p_3^{(0,1)} p_4^{(1,1)} p_0^{(0,0,1,1,0)} + 2 u'_{31} u'_{41} v'_3 v'_4 u'_{42} p_3^{(1,0)} p_4^{(1,1)} p_0^{(0,0,1,1,0)} + 4 u'_{31} u'_{32} u'_{41} u'_{42} v'_4 v'_3 p_3^{(0,1)} p_3^{(1,0)} p_4^{(1,1)} p_0^{(0,0,1,1,0)} + \\
& 4 u'_{31} u'_{41} (u'_{42})^2 v'_3 v'_4 p_4^{(0,1)} p_3^{(1,0)} p_4^{(1,1)} p_0^{(0,0,1,1,0)} + 4 u'_{32} (u'_{41})^2 u'_{42} v'_3 v'_4 p_3^{(0,1)} p_4^{(1,0)} p_4^{(1,1)} p_0^{(0,0,1,1,0)} + \\
& 4 u'_{31} u'_{32} u'_{41} u'_{42} v'_3 v'_4 p_3^{(1,1)} p_4^{(1,1)} p_0^{(0,0,1,1,0)} + 2 u'_{31} (u'_{32})^2 u'_{41} v'_3 v'_4 p_4^{(1,0)} p_3^{(1,2)} p_0^{(0,0,1,1,0)} + 2 u'_{31} u'_{41} (u'_{42})^2 v'_3 v'_4 p_3^{(1,0)} p_4^{(1,2)} p_0^{(0,0,1,1,0)} + \\
& (u'_{31})^2 (u'_{42})^2 v'_3 v'_4 (p_4^{(0,1)})^2 p_3^{(2,0)} p_0^{(0,0,1,1,0)} + (u'_{31})^2 v'_3 v'_4 u'_{42} p_4^{(0,1)} p_3^{(2,0)} p_0^{(0,0,1,1,0)} + 2 (u'_{31})^2 u'_{32} u'_{42} v'_4 v'_3 p_3^{(0,1)} p_4^{(0,1)} p_3^{(2,0)} p_0^{(0,0,1,1,0)} + \\
& (u'_{31})^2 (u'_{42})^2 v'_3 v'_4 p_4^{(0,2)} p_3^{(2,0)} p_0^{(0,0,1,1,0)} + (u'_{32})^2 (u'_{41})^2 v'_4 v'_3 (p_3^{(0,1)})^2 p_4^{(2,0)} p_0^{(0,0,1,1,0)} + (u'_{41})^2 v'_3 v'_4 u'_{32} p_3^{(0,1)} p_4^{(2,0)} p_0^{(0,0,1,1,0)} + \\
& 2 u'_{32} (u'_{41})^2 u'_{42} v'_3 v'_4 p_3^{(0,1)} p_4^{(0,1)} p_4^{(2,0)} p_0^{(0,0,1,1,0)} + (u'_{32})^2 (u'_{41})^2 v'_3 v'_4 p_3^{(0,2)} p_4^{(2,0)} p_0^{(0,0,1,1,0)} + 2 (u'_{31})^2 u'_{32} u'_{42} v'_3 v'_4 p_4^{(0,1)} p_3^{(2,1)} p_0^{(0,0,1,1,0)} + \\
& 2 u'_{32} (u'_{41})^2 u'_{42} v'_3 v'_4 p_3^{(0,1)} p_4^{(2,1)} p_0^{(0,0,1,1,0)} + 2 (u'_{31})^2 u'_{42} u'_{52} v'_4 v'_5 v'_3 p_4^{(0,1)} p_5^{(0,1)} (p_3^{(1,0)})^2 p_0^{(0,0,1,1,1)} + \\
& 2 u'_{32} (u'_{41})^2 u'_{52} v'_3 v'_5 v'_4 p_3^{(0,1)} p_5^{(0,1)} (p_4^{(1,0)})^2 p_0^{(0,0,1,1,1)} + 2 u'_{32} u'_{42} (u'_{51})^2 v'_3 v'_4 v'_5 p_3^{(0,1)} p_4^{(0,1)} (p_5^{(1,0)})^2 p_0^{(0,0,1,1,1)} + \\
& 2 u'_{42} u'_{52} v'_3 v'_4 v'_5 u'_{31} p_4^{(0,1)} p_5^{(0,1)} p_3^{(1,0)} p_0^{(0,0,1,1,1)} + 2 u'_{32} u'_{52} v'_3 v'_4 v'_5 u'_{41} p_3^{(0,1)} p_5^{(0,1)} p_4^{(1,0)} p_0^{(0,0,1,1,1)} + \\
& 2 u'_{31} u'_{41} (u'_{52})^2 v'_3 v'_4 v'_5 (p_5^{(0,1)})^2 p_3^{(1,0)} p_4^{(1,0)} p_0^{(0,0,1,1,1)} + 2 u'_{31} u'_{41} v'_3 v'_4 v'_5 u'_{52} p_5^{(0,1)} p_3^{(1,0)} p_4^{(1,0)} p_0^{(0,0,1,1,1)} + \\
& 4 u'_{31} u'_{32} u'_{41} u'_{52} v'_4 v'_5 v'_3 p_3^{(0,1)} p_5^{(1,0)} p_3^{(1,0)} p_4^{(1,0)} p_0^{(0,0,1,1,1)} + 4 u'_{31} u'_{41} u'_{42} u'_{52} v'_3 v'_5 v'_4 p_4^{(0,1)} p_5^{(0,1)} p_3^{(1,0)} p_4^{(1,0)} p_0^{(0,0,1,1,1)} + \\
& 2 u'_{31} u'_{41} (u'_{52})^2 v'_3 v'_4 v'_5 p_5^{(0,2)} p_3^{(1,0)} p_4^{(1,0)} p_0^{(0,0,1,1,1)} + 2 u'_{32} u'_{42} v'_3 v'_4 v'_5 u'_{51} p_3^{(0,1)} p_4^{(0,1)} p_5^{(1,0)} p_0^{(0,0,1,1,1)} + \\
& 2 u'_{31} (u'_{42})^2 u'_{51} v'_3 v'_5 v'_4 (p_4^{(0,1)})^2 p_3^{(1,0)} p_5^{(1,0)} p_0^{(0,0,1,1,1)} + 2 u'_{31} u'_{51} v'_3 v'_4 v'_5 u'_{42} p_4^{(0,1)} p_3^{(1,0)} p_5^{(1,0)} p_0^{(0,0,1,1,1)} + \\
& 4 u'_{31} u'_{32} u'_{42} u'_{51} v'_4 v'_5 v'_3 p_3^{(0,1)} p_4^{(0,1)} p_3^{(1,0)} p_5^{(1,0)} p_0^{(0,0,1,1,1)} + 4 u'_{31} u'_{42} u'_{51} u'_{52} v'_3 v'_4 v'_5 p_4^{(0,1)} p_5^{(0,1)} p_3^{(1,0)} p_5^{(1,0)} p_0^{(0,0,1,1,1)} + \\
& 2 u'_{31} (u'_{42})^2 u'_{51} v'_3 v'_4 v'_5 p_4^{(0,2)} p_3^{(1,0)} p_5^{(1,0)} p_0^{(0,0,1,1,1)} + 2 (u'_{32})^2 u'_{41} u'_{51} v'_4 v'_5 v'_3 (p_3^{(0,1)})^2 p_4^{(1,0)} p_5^{(1,0)} p_0^{(0,0,1,1,1)} + \\
& 2 u'_{41} u'_{51} v'_3 v'_4 v'_5 u'_{32} p_3^{(0,1)} p_4^{(1,0)} p_5^{(1,0)} p_0^{(0,0,1,1,1)} + 4 u'_{32} u'_{41} u'_{42} u'_{51} v'_3 v'_5 v'_4 p_3^{(0,1)} p_4^{(0,1)} p_4^{(1,0)} p_5^{(1,0)} p_0^{(0,0,1,1,1)} + \\
& 4 u'_{32} u'_{41} u'_{51} u'_{52} v'_3 v'_4 v'_5 p_3^{(0,1)} p_5^{(1,0)} p_4^{(1,0)} p_5^{(1,0)} p_0^{(0,0,1,1,1)} + 2 (u'_{32})^2 u'_{41} u'_{51} v'_3 v'_4 v'_5 p_3^{(0,2)} p_4^{(1,0)} p_5^{(1,0)} p_0^{(0,0,1,1,1)} + \\
& 4 u'_{31} u'_{32} u'_{41} u'_{52} v'_3 v'_4 v'_5 p_5^{(0,1)} p_4^{(1,0)} p_3^{(1,1)} p_0^{(0,0,1,1,1)} + 4 u'_{31} u'_{32} u'_{42} u'_{51} v'_3 v'_4 v'_5 p_4^{(0,1)} p_5^{(1,0)} p_3^{(1,1)} p_0^{(0,0,1,1,1)} + \\
& 4 u'_{31} u'_{41} u'_{42} u'_{52} v'_3 v'_4 v'_5 p_5^{(0,1)} p_3^{(1,0)} p_4^{(1,1)} p_0^{(0,0,1,1,1)} + 4 u'_{32} u'_{41} u'_{42} u'_{51} v'_3 v'_4 v'_5 p_3^{(0,1)} p_5^{(1,0)} p_4^{(1,1)} p_0^{(0,0,1,1,1)} + \\
& 4 u'_{31} u'_{42} u'_{51} u'_{52} v'_3 v'_4 v'_5 p_4^{(0,1)} p_3^{(1,0)} p_5^{(1,1)} p_0^{(0,0,1,1,1)} + 4 u'_{32} u'_{41} u'_{51} u'_{52} v'_3 v'_4 v'_5 p_3^{(0,1)} p_4^{(1,0)} p_5^{(1,1)} p_0^{(0,0,1,1,1)} + \\
& 2 (u'_{31})^2 u'_{42} u'_{52} v'_3 v'_4 v'_5 p_4^{(0,1)} p_5^{(0,1)} p_3^{(2,0)} p_0^{(0,0,1,1,1)} + 2 u'_{32} (u'_{41})^2 u'_{52} v'_3 v'_4 v'_5 p_3^{(0,1)} p_5^{(0,1)} p_4^{(2,0)} p_0^{(0,0,1,1,1)} + \\
& 2 u'_{32} u'_{42} (u'_{51})^2 v'_3 v'_4 v'_5 p_3^{(0,1)} p_4^{(0,1)} p_5^{(2,0)} p_0^{(0,0,1,1,1)} + 2 u'_{32} u'_{42} (u'_{51})^2 v'_3 v'_4 (v'_5)^2 p_3^{(0,1)} p_4^{(0,1)} (p_5^{(1,0)})^2 p_0^{(0,0,1,1,2)} + \\
& 2 u'_{31} u'_{41} (u'_{52})^2 v'_3 v'_4 (v'_5)^2 (p_5^{(0,1)})^2 p_3^{(1,0)} p_4^{(1,0)} p_0^{(0,0,1,1,2)} + 4 u'_{31} u'_{42} u'_{51} u'_{52} v'_3 v'_4 (v'_5)^2 p_4^{(0,1)} p_5^{(0,1)} p_3^{(1,0)} p_5^{(1,0)} p_0^{(0,0,1,1,2)} + \\
& 4 u'_{32} u'_{41} u'_{51} u'_{52} v'_3 v'_4 (v'_5)^2 p_3^{(0,1)} p_5^{(0,1)} p_4^{(1,0)} p_5^{(1,0)} p_0^{(0,0,1,1,2)} + (u'_{31})^2 (u'_{42})^2 (v'_4)^2 v'_3 (p_4^{(0,1)})^2 (p_3^{(1,0)})^2 p_0^{(0,0,1,2,0)} + \\
& (u'_{32})^2 (u'_{41})^2 (v'_4)^2 v'_3 (p_3^{(0,1)})^2 (p_4^{(1,0)})^2 p_0^{(0,0,1,2,0)} + (u'_{41})^2 v'_3 (v'_4)^2 u'_{32} p_3^{(0,1)} (p_4^{(1,0)})^2 p_0^{(0,0,1,2,0)} + \\
& 6 u'_{32} (u'_{41})^2 u'_{42} v'_3 v'_4 v'_4 p_3^{(0,1)} p_4^{(0,1)} (p_4^{(1,0)})^2 p_0^{(0,0,1,2,0)} + (u'_{32})^2 (u'_{41})^2 v'_3 (v'_4)^2 p_3^{(0,2)} (p_4^{(1,0)})^2 p_0^{(0,0,1,2,0)} + \\
& (u'_{42})^2 v'_3 (v'_4)^2 u'_{31} (p_4^{(0,1)})^2 p_3^{(1,0)} p_0^{(0,0,1,2,0)} + 2 u'_{32} u'_{42} v'_3 (v'_4)^2 u'_{41} p_3^{(0,1)} p_4^{(0,1)} p_4^{(1,0)} p_0^{(0,0,1,2,0)} + \\
& 6 u'_{31} u'_{41} (u'_{42})^2 v'_3 v'_4 v'_4 (p_4^{(0,1)})^2 p_3^{(1,0)} p_4^{(1,0)} p_0^{(0,0,1,2,0)} + 2 u'_{31} u'_{41} v'_3 (v'_4)^2 u'_{42} p_4^{(0,1)} p_3^{(1,0)} p_4^{(1,0)} p_0^{(0,0,1,2,0)} + \\
& 4 u'_{31} u'_{32} u'_{41} u'_{42} (v'_4)^2 v'_3 p_3^{(0,1)} p_4^{(0,1)} p_3^{(1,0)} p_4^{(1,0)} p_0^{(0,0,1,2,0)} + 2 u'_{31} u'_{41} (u'_{42})^2 v'_3 (v'_4)^2 p_4^{(0,2)} p_3^{(1,0)} p_4^{(1,0)} p_0^{(0,0,1,2,0)} + \\
& 4 u'_{31} u'_{32} u'_{41} u'_{42} v'_3 (v'_4)^2 p_4^{(0,1)} p_4^{(1,0)} p_3^{(1,0)} p_0^{(0,0,1,2,0)} + 4 u'_{31} u'_{41} (u'_{42})^2 v'_3 (v'_4)^2 p_4^{(0,1)} p_3^{(1,0)} p_4^{(1,1)} p_0^{(0,0,1,2,0)} +
\end{aligned}$$

$$\begin{aligned}
& 4 u'_{32} (u'_{41})^2 u'_{42} v'_3 (v'_4)^2 p_3^{(0,1)} p_4^{(1,0)} p_4^{(1,1)} p_0^{(0,0,1,2,0)} + (u'_{31})^2 (u'_{42})^2 v'_3 (v'_4)^2 (p_4^{(0,1)})^2 p_3^{(2,0)} p_0^{(0,0,1,2,0)} + \\
& 2 u'_{32} (u'_{41})^2 u'_{42} v'_3 (v'_4)^2 p_3^{(0,1)} p_4^{(0,1)} p_4^{(2,0)} p_0^{(0,0,1,2,0)} + 2 u'_{32} (u'_{41})^2 u'_{52} v'_3 (v'_4)^2 v'_5 p_3^{(0,1)} p_5^{(0,1)} (p_4^{(1,0)})^2 p_0^{(0,0,1,2,1)} + \\
& 4 u'_{31} u'_{41} u'_{42} u'_{52} v'_3 (v'_4)^2 v'_5 p_3^{(0,1)} p_5^{(0,1)} p_3^{(1,0)} p_4^{(1,0)} p_0^{(0,0,1,2,1)} + 2 u'_{31} (u'_{42})^2 u'_{51} v'_3 (v'_4)^2 v'_5 (p_4^{(0,1)})^2 p_3^{(1,0)} p_5^{(1,0)} p_0^{(0,0,1,2,1)} + \\
& 4 u'_{32} u'_{41} u'_{42} u'_{51} v'_3 (v'_4)^2 v'_5 p_3^{(0,1)} p_4^{(0,1)} p_4^{(1,0)} p_5^{(1,0)} p_0^{(0,0,1,2,1)} + 2 u'_{32} (u'_{41})^2 u'_{42} v'_3 (v'_4)^3 p_3^{(0,1)} p_4^{(0,1)} (p_4^{(1,0)})^2 p_0^{(0,0,1,3,0)} + \\
& 2 u'_{31} u'_{41} (u'_{42})^2 v'_3 (v'_4)^3 (p_4^{(0,1)})^2 p_3^{(1,0)} p_4^{(1,0)} p_0^{(0,0,1,3,0)} + 3 (u'_{31})^2 (u'_{32})^2 (v'_3)^2 (p_3^{(0,1)})^2 (p_3^{(1,0)})^2 p_0^{(0,0,2,0,0)} + \\
& 4 (u'_{31})^2 (u'_{32})^2 v'_3 v'_3 (p_3^{(0,1)})^2 (p_3^{(1,0)})^2 p_0^{(0,0,2,0,0)} + 3 (u'_{31})^2 v'_3 u'_{32} v'_3 p_3^{(0,1)} (p_3^{(1,0)})^2 p_0^{(0,0,2,0,0)} + \\
& 3 (u'_{31})^2 (u'_{32})^2 v'_3 v'_3 (p_3^{(0,2)})^2 (p_3^{(1,0)})^2 p_0^{(0,0,2,0,0)} + 2 (u'_{31})^2 (u'_{32})^2 (v'_3)^2 (p_3^{(1,1)})^2 p_0^{(0,0,2,0,0)} + 3 (u'_{32})^2 v'_3 u'_{31} v'_3 (p_3^{(0,1)})^2 p_3^{(1,0)} p_0^{(0,0,2,0,0)} + \\
& (v'_3)^2 u'_{31} u'_{32} p_3^{(0,1)} p_3^{(1,0)} p_0^{(0,0,2,0,0)} + (u'_{32})^2 (v'_3)^2 u'_{31} p_3^{(0,2)} p_3^{(1,0)} p_0^{(0,0,2,0,0)} + 2 (u'_{32})^2 (v'_3)^2 u'_{31} p_3^{(0,1)} p_3^{(1,1)} p_0^{(0,0,2,0,0)} + \\
& 2 (u'_{31})^2 (v'_3)^2 u'_{32} p_3^{(1,0)} p_3^{(1,1)} p_0^{(0,0,2,0,0)} + 12 (u'_{31})^2 (u'_{32})^2 v'_3 v'_3 p_3^{(0,1)} p_3^{(1,0)} p_3^{(1,1)} p_0^{(0,0,2,0,0)} + 2 (u'_{31})^2 (u'_{32})^2 (v'_3)^2 p_3^{(1,0)} p_3^{(1,2)} p_0^{(0,0,2,0,0)} + \\
& 3 (u'_{31})^2 (u'_{32})^2 v'_3 v'_3 (p_3^{(0,1)})^2 p_3^{(2,0)} p_0^{(0,0,2,0,0)} + (u'_{31})^2 (v'_3)^2 u'_{32} p_3^{(0,1)} p_3^{(2,0)} p_0^{(0,0,2,0,0)} + (u'_{31})^2 (u'_{32})^2 (v'_3)^2 p_3^{(0,2)} p_3^{(2,0)} p_0^{(0,0,2,0,0)} + \\
& 2 (u'_{31})^2 (u'_{32})^2 (v'_3)^2 p_3^{(0,1)} p_3^{(2,1)} p_0^{(0,0,2,0,0)} + (u'_{31})^2 (u'_{52})^2 (v'_3)^2 v'_5 (p_5^{(0,1)})^2 (p_3^{(1,0)})^2 p_0^{(0,0,2,0,1)} + (u'_{31})^2 (v'_3)^2 v'_5 u'_{52} p_5^{(0,1)} (p_3^{(1,0)})^2 p_0^{(0,0,2,0,1)} + \\
& 6 (u'_{31})^2 u'_{32} u'_{52} v'_3 v'_5 v'_3 p_3^{(0,1)} p_5^{(0,1)} (p_3^{(1,0)})^2 p_0^{(0,0,2,0,1)} + (u'_{31})^2 (u'_{52})^2 (v'_3)^2 v'_5 p_5^{(0,2)} (p_3^{(1,0)})^2 p_0^{(0,0,2,0,1)} + \\
& (u'_{32})^2 (u'_{51})^2 (v'_3)^2 v'_5 (p_3^{(0,1)})^2 (p_5^{(1,0)})^2 p_0^{(0,0,2,0,1)} + 2 u'_{32} u'_{52} (v'_3)^2 v'_5 u'_{31} p_3^{(0,1)} p_5^{(0,1)} p_3^{(1,0)} p_0^{(0,0,2,0,1)} + \\
& (u'_{32})^2 (v'_3)^2 v'_5 u'_{51} (p_3^{(0,1)})^2 p_5^{(1,0)} p_0^{(0,0,2,0,1)} + 6 u'_{31} (u'_{32})^2 u'_{51} v'_3 v'_5 v'_3 (p_3^{(0,1)})^2 p_3^{(1,0)} p_5^{(1,0)} p_0^{(0,0,2,0,1)} + \\
& 2 u'_{31} u'_{51} (v'_3)^2 v'_5 u'_{32} p_3^{(0,1)} p_3^{(1,0)} p_5^{(1,0)} p_0^{(0,0,2,0,1)} + 4 u'_{31} u'_{32} u'_{51} u'_{52} (v'_3)^2 v'_5 p_3^{(0,1)} p_3^{(1,0)} p_5^{(1,0)} p_0^{(0,0,2,0,1)} + \\
& 2 u'_{31} (u'_{32})^2 u'_{51} (v'_3)^2 v'_5 p_3^{(0,2)} p_3^{(1,0)} p_5^{(1,0)} p_0^{(0,0,2,0,1)} + 4 (u'_{31})^2 u'_{32} u'_{52} (v'_3)^2 v'_5 p_5^{(0,1)} p_3^{(1,0)} p_3^{(1,1)} p_0^{(0,0,2,0,1)} + \\
& 4 u'_{31} (u'_{32})^2 u'_{51} (v'_3)^2 v'_5 p_3^{(0,1)} p_5^{(1,0)} p_3^{(1,1)} p_0^{(0,0,2,0,1)} + 4 u'_{31} u'_{32} u'_{51} u'_{52} (v'_3)^2 v'_5 p_3^{(0,1)} p_3^{(1,0)} p_5^{(1,1)} p_0^{(0,0,2,0,1)} + \\
& 2 (u'_{31})^2 u'_{32} u'_{52} (v'_3)^2 v'_5 p_3^{(0,1)} p_5^{(1,0)} p_3^{(2,0)} p_0^{(0,0,2,0,1)} + (u'_{32})^2 (u'_{51})^2 (v'_3)^2 v'_5 (p_3^{(0,1)})^2 p_5^{(2,0)} p_0^{(0,0,2,0,1)} + \\
& (u'_{31})^2 (u'_{52})^2 (v'_3)^2 (v'_5)^2 (p_5^{(0,1)})^2 (p_3^{(1,0)})^2 p_0^{(0,0,2,0,2)} + (u'_{32})^2 (u'_{51})^2 (v'_3)^2 (v'_5)^2 (p_3^{(0,1)})^2 (p_5^{(1,0)})^2 p_0^{(0,0,2,0,2)} + \\
& 4 u'_{31} u'_{32} u'_{51} u'_{52} (v'_3)^2 (v'_5)^2 p_3^{(0,1)} p_5^{(0,1)} p_3^{(1,0)} p_5^{(1,0)} p_0^{(0,0,2,0,2)} + (u'_{31})^2 (u'_{42})^2 (v'_3)^2 v'_4 (p_4^{(0,1)})^2 (p_3^{(1,0)})^2 p_0^{(0,0,2,1,0)} + \\
& (u'_{31})^2 (v'_3)^2 v'_4 u'_{42} p_4^{(0,1)} (p_3^{(1,0)})^2 p_0^{(0,0,2,1,0)} + 6 (u'_{31})^2 u'_{32} u'_{42} v'_3 v'_4 v'_3 p_3^{(0,1)} p_4^{(0,1)} (p_3^{(1,0)})^2 p_0^{(0,0,2,1,0)} + \\
& (u'_{31})^2 (u'_{42})^2 (v'_3)^2 v'_4 p_4^{(0,2)} (p_3^{(1,0)})^2 p_0^{(0,0,2,1,0)} + (u'_{32})^2 (u'_{41})^2 (v'_3)^2 v'_4 (p_3^{(0,1)})^2 (p_4^{(1,0)})^2 p_0^{(0,0,2,1,0)} + \\
& 2 u'_{32} u'_{42} (v'_3)^2 v'_4 u'_{31} p_3^{(0,1)} p_4^{(0,1)} p_3^{(1,0)} p_0^{(0,0,2,1,0)} + (u'_{32})^2 (v'_3)^2 v'_4 u'_{41} (p_3^{(0,1)})^2 p_4^{(1,0)} p_0^{(0,0,2,1,0)} + \\
& 6 u'_{31} (u'_{32})^2 u'_{41} v'_3 v'_4 v'_3 (p_3^{(0,1)})^2 p_3^{(1,0)} p_4^{(1,0)} p_0^{(0,0,2,1,0)} + 2 u'_{31} u'_{41} (v'_3)^2 v'_4 u'_{32} p_3^{(0,1)} p_3^{(1,0)} p_4^{(1,0)} p_0^{(0,0,2,1,0)} + \\
& 4 u'_{31} u'_{32} u'_{41} u'_{42} (v'_3)^2 v'_4 p_3^{(0,1)} p_4^{(1,0)} p_3^{(1,0)} p_4^{(1,0)} p_0^{(0,0,2,1,0)} + 2 u'_{31} (u'_{32})^2 u'_{41} (v'_3)^2 v'_4 p_3^{(0,2)} p_3^{(1,0)} p_4^{(1,0)} p_0^{(0,0,2,1,0)} + \\
& 4 (u'_{31})^2 u'_{32} u'_{42} (v'_3)^2 v'_4 p_4^{(0,1)} p_3^{(1,0)} p_3^{(1,1)} p_0^{(0,0,2,1,0)} + 4 u'_{31} (u'_{32})^2 u'_{41} (v'_3)^2 v'_4 p_3^{(0,1)} p_4^{(1,0)} p_3^{(1,1)} p_0^{(0,0,2,1,0)} + \\
& 4 u'_{31} u'_{32} u'_{41} u'_{42} (v'_3)^2 v'_4 p_3^{(1,0)} p_3^{(1,1)} p_4^{(1,0)} p_0^{(0,0,2,1,0)} + 2 (u'_{31})^2 u'_{32} u'_{42} (v'_3)^2 v'_4 p_3^{(0,1)} p_4^{(0,1)} p_3^{(2,0)} p_0^{(0,0,2,1,0)} + \\
& (u'_{32})^2 (u'_{41})^2 (v'_3)^2 v'_4 (p_3^{(0,1)})^2 p_4^{(2,0)} p_0^{(0,0,2,1,0)} + 2 (u'_{31})^2 u'_{42} u'_{52} (v'_3)^2 v'_4 v'_5 p_4^{(0,1)} p_5^{(0,1)} (p_3^{(1,0)})^2 p_0^{(0,0,2,1,1)} + \\
& 4 u'_{31} u'_{32} u'_{41} u'_{52} (v'_3)^2 v'_4 v'_5 p_3^{(0,1)} p_5^{(0,1)} p_3^{(1,0)} p_4^{(1,0)} p_0^{(0,0,2,1,1)} + 4 u'_{31} u'_{32} u'_{42} u'_{51} (v'_3)^2 v'_4 v'_5 p_3^{(0,1)} p_4^{(0,1)} p_3^{(1,0)} p_5^{(1,0)} p_0^{(0,0,2,1,1)} + \\
& 2 (u'_{32})^2 u'_{41} u'_{51} (v'_3)^2 v'_4 v'_5 (p_3^{(0,1)})^2 p_4^{(1,0)} p_5^{(1,0)} p_0^{(0,0,2,1,1)} + (u'_{31})^2 (u'_{42})^2 (v'_3)^2 (v'_4)^2 (p_4^{(0,1)})^2 (p_3^{(1,0)})^2 p_0^{(0,0,2,2,0)} + \\
& (u'_{32})^2 (u'_{41})^2 (v'_3)^2 (v'_4)^2 (p_3^{(0,1)})^2 (p_4^{(1,0)})^2 p_0^{(0,0,2,2,0)} + 4 u'_{31} u'_{32} u'_{41} u'_{42} (v'_3)^2 (v'_4)^2 p_3^{(0,1)} p_4^{(0,1)} p_3^{(1,0)} p_4^{(1,0)} p_0^{(0,0,2,2,0)} + \\
& 6 (u'_{31})^2 (u'_{32})^2 (v'_3)^2 v'_3 (p_3^{(0,1)})^2 (p_3^{(1,0)})^2 p_0^{(0,0,3,0,0)} + (u'_{31})^2 (v'_3)^3 u'_{32} p_3^{(0,1)} (p_3^{(1,0)})^2 p_0^{(0,0,3,0,0)} + (u'_{31})^2 (u'_{32})^2 (v'_3)^3 p_3^{(0,2)} (p_3^{(1,0)})^2 p_0^{(0,0,3,0,0)} + \\
& (u'_{32})^2 (v'_3)^3 u'_{31} (p_3^{(0,1)})^2 p_3^{(1,0)} p_0^{(0,0,3,0,0)} + 4 (u'_{31})^2 (u'_{32})^2 (v'_3)^3 p_3^{(0,1)} p_3^{(1,0)} p_3^{(1,1)} p_0^{(0,0,3,0,0)} + (u'_{31})^2 (u'_{32})^2 (v'_3)^3 (p_3^{(0,1)})^2 p_3^{(2,0)} p_0^{(0,0,3,0,0)} + \\
& 2 (u'_{31})^2 u'_{32} u'_{52} (v'_3)^3 v'_5 p_3^{(0,1)} p_5^{(0,1)} (p_3^{(1,0)})^2 p_0^{(0,0,3,0,1)} + 2 u'_{31} (u'_{32})^2 u'_{51} (v'_3)^3 v'_5 (p_3^{(0,1)})^2 p_3^{(1,0)} p_5^{(1,0)} p_0^{(0,0,3,0,1)} + \\
& 2 (u'_{31})^2 u'_{32} u'_{42} (v'_3)^3 v'_4 p_3^{(0,1)} p_4^{(0,1)} (p_3^{(1,0)})^2 p_0^{(0,0,3,1,0)} + 2 u'_{31} (u'_{32})^2 u'_{41} (v'_3)^3 v'_4 (p_3^{(0,1)})^2 p_3^{(1,0)} p_4^{(1,0)} p_0^{(0,0,3,1,0)} + \\
& (u'_{31})^2 (u'_{32})^2 (v'_3)^4 (p_3^{(0,1)})^2 (p_3^{(1,0)})^2 p_0^{(0,0,4,0,0)} + (u'_{21})^2 (u'_{22})^2 v_2^{(4)} (p_2^{(0,1)})^2 (p_2^{(1,0)})^2 p_0^{(0,1,0,0,0)} + (u'_{21})^2 u'_{22} v_2^{(3)} p_2^{(0,1)} (p_2^{(1,0)})^2 p_0^{(0,1,0,0,0)} + \\
& (u'_{21})^2 (u'_{22})^2 v_2^{(3)} p_2^{(0,2)} (p_2^{(1,0)})^2 p_0^{(0,1,0,0,0)} + 2 (u'_{21})^2 (u'_{22})^2 v_2^{(2)} (p_2^{(1,1)})^2 p_0^{(0,1,0,0,0)} + (u'_{22})^2 u'_{21} v_2^{(3)} (p_2^{(0,1)})^2 p_2^{(1,0)} p_0^{(0,1,0,0,0)} + \\
& u'_{21} u'_{22} v_2^{(2)} p_2^{(0,1)} p_2^{(1,0)} p_0^{(0,1,0,0,0)} + (u'_{22})^2 u'_{21} v_2^{(2)} p_2^{(0,2)} p_2^{(1,0)} p_0^{(0,1,0,0,0)} + v_2 u'_{21} u'_{22} p_2^{(1,1)} p_0^{(0,1,0,0,0)} + \\
& 2 (u'_{22})^2 u'_{21} v_2^{(1)} p_2^{(1,1)} p_2^{(1,1)} p_0^{(0,1,0,0,0)} + 2 (u'_{21})^2 u'_{22} v_2^{(1)} p_2^{(1,0)} p_2^{(1,1)} p_0^{(0,1,0,0,0)} + 4 (u'_{21})^2 (u'_{22})^2 v_2^{(3)} p_2^{(0,1)} p_2^{(1,0)} p_2^{(1,1)} p_0^{(0,1,0,0,0)} + \\
& (u'_{22})^2 v_2 u'_{21} p_2^{(1,2)} p_0^{(0,1,0,0,0)} + 2 (u'_{21})^2 (u'_{22})^2 v_2^{(1)} p_2^{(1,0)} p_2^{(1,2)} p_0^{(0,1,0,0,0)} + (u'_{21})^2 (u'_{22})^2 v_2^{(3)} (p_2^{(0,1)})^2 p_2^{(2,0)} p_0^{(0,1,0,0,0)} + \\
& (u'_{21})^2 u'_{22} v_2^{(2)} p_2^{(0,1)} p_2^{(2,0)} p_0^{(0,1,0,0,0)} + (u'_{21})^2 (u'_{22})^2 v_2^{(2)} p_2^{(0,2)} p_2^{(2,0)} p_0^{(0,1,0,0,0)} + (u'_{21})^2 v_2 u'_{22} p_2^{(2,1)} p_0^{(0,1,0,0,0)} + \\
& 2 (u'_{21})^2 (u'_{22})^2 v_2^{(1)} p_2^{(0,1)} p_2^{(2,1)} p_0^{(0,1,0,0,0)} + (u'_{21})^2 (u'_{22})^2 v_2 p_2^{(2,2)} p_0^{(0,1,0,0,0)} + (u'_{21})^2 (u'_{52})^2 v_2 v'_5 (p_5^{(0,1)})^2 (p_2^{(1,0)})^2 p_0^{(0,1,0,0,1)} + \\
& (u'_{21})^2 v_2 u'_{52} v_2 p_5^{(0,1)} (p_2^{(1,0)})^2 p_0^{(0,1,0,0,1)} + 2 (u'_{21})^2 u'_{22} u'_{52} v_2 v_2^{(3)} p_2^{(0,1)} p_5^{(0,1)} (p_2^{(1,0)})^2 p_0^{(0,1,0,0,1)} +
\end{aligned}$$

$$\begin{aligned}
& (u'_{21})^2 (u'_{52})^2 v'_5 v''_5 p_5^{(0,2)} (p_2^{(1,0)})^2 p_0^{(0,1,0,0,1)} + (u'_{22})^2 (u'_{51})^2 v''_2 v'_5 (p_2^{(0,1)})^2 (p_5^{(1,0)})^2 p_0^{(0,1,0,0,1)} + \\
& (u'_{51})^2 v'_2 u'_{22} v'_5 p_2^{(0,1)} (p_5^{(1,0)})^2 p_0^{(0,1,0,0,1)} + 2 u'_{22} (u'_{51})^2 u'_{52} v'_2 v'_5 p_2^{(0,1)} p_5^{(0,1)} (p_5^{(1,0)})^2 p_0^{(0,1,0,0,1)} + \\
& (u'_{22})^2 (u'_{51})^2 v'_2 v'_5 p_2^{(0,2)} (p_5^{(1,0)})^2 p_0^{(0,1,0,0,1)} + (u'_{52})^2 v'_2 u'_{21} v'_5 (p_5^{(0,1)})^2 p_2^{(1,0)} p_0^{(0,1,0,0,1)} + v'_2 v'_5 u'_{21} u'_{52} p_5^{(0,1)} p_2^{(1,0)} p_0^{(0,1,0,0,1)} + \\
& 2 u'_{22} u'_{52} v'_5 u'_{21} v'_2 p_2^{(0,1)} p_5^{(0,1)} p_2^{(1,0)} p_0^{(0,1,0,0,1)} + (u'_{52})^2 v'_2 v'_5 u'_{21} p_5^{(0,2)} p_2^{(1,0)} p_0^{(0,1,0,0,1)} + (u'_{22})^2 v'_5 u'_{51} v'_2 (p_2^{(0,1)})^2 p_5^{(1,0)} p_0^{(0,1,0,0,1)} + \\
& v'_2 v'_5 u'_{22} u'_{51} p_2^{(0,1)} p_5^{(1,0)} p_0^{(0,1,0,0,1)} + 2 u'_{22} u'_{52} v'_2 u'_{51} v'_5 p_2^{(0,1)} p_5^{(0,1)} p_5^{(1,0)} p_0^{(0,1,0,0,1)} + (u'_{22})^2 v'_2 v'_5 u'_{51} p_2^{(0,2)} p_5^{(1,0)} p_0^{(0,1,0,0,1)} + \\
& 2 u'_{21} (u'_{22})^2 u'_{51} v'_5 v'_2 (p_2^{(0,1)})^2 p_2^{(1,0)} p_5^{(1,0)} p_0^{(0,1,0,0,1)} + 2 u'_{21} u'_{51} (u'_{52})^2 v'_2 v'_5 (p_5^{(0,1)})^2 p_2^{(1,0)} p_5^{(1,0)} p_0^{(0,1,0,0,1)} + \\
& 2 u'_{21} u'_{51} v'_5 u'_{22} v'_2 p_2^{(0,1)} p_2^{(1,0)} p_5^{(1,0)} p_0^{(0,1,0,0,1)} + 2 u'_{21} u'_{51} v'_2 u'_{52} v'_5 p_5^{(0,1)} p_2^{(1,0)} p_5^{(1,0)} p_0^{(0,1,0,0,1)} + \\
& 4 u'_{21} u'_{22} u'_{51} u'_{52} v'_2 v'_5 p_2^{(0,1)} p_5^{(0,1)} p_2^{(1,0)} p_5^{(1,0)} p_0^{(0,1,0,0,1)} + 2 u'_{21} (u'_{22})^2 u'_{51} v'_5 v'_2 p_2^{(0,2)} p_2^{(1,0)} p_5^{(1,0)} p_0^{(0,1,0,0,1)} + \\
& 2 u'_{21} u'_{51} (u'_{52})^2 v'_2 v'_5 p_5^{(0,2)} p_2^{(1,0)} p_5^{(1,0)} p_0^{(0,1,0,0,1)} + 2 u'_{22} u'_{52} v'_2 v'_5 u'_{21} p_5^{(0,1)} p_2^{(1,1)} p_0^{(0,1,0,0,1)} + \\
& 4 (u'_{21})^2 u'_{22} u'_{52} v'_5 v'_2 p_5^{(0,1)} p_2^{(1,0)} p_2^{(1,1)} p_0^{(0,1,0,0,1)} + 2 u'_{21} u'_{51} v'_2 v'_5 u'_{22} p_5^{(1,0)} p_2^{(1,1)} p_0^{(0,1,0,0,1)} + \\
& 4 u'_{21} (u'_{22})^2 u'_{51} v'_5 v'_2 p_2^{(0,1)} p_5^{(1,1)} p_0^{(0,1,0,0,1)} + 4 u'_{21} u'_{22} u'_{51} u'_{52} v'_2 v'_5 p_5^{(0,1)} p_5^{(1,1)} p_2^{(1,0)} p_0^{(0,1,0,0,1)} + \\
& 2 u'_{22} u'_{52} v'_2 v'_5 u'_{51} p_2^{(0,1)} p_5^{(1,1)} p_0^{(0,1,0,0,1)} + 2 u'_{21} u'_{51} v'_2 v'_5 u'_{52} p_2^{(1,0)} p_5^{(1,1)} p_0^{(0,1,0,0,1)} + 4 u'_{21} u'_{22} u'_{51} u'_{52} v'_5 v'_2 p_2^{(0,1)} p_2^{(1,0)} p_5^{(1,1)} p_0^{(0,1,0,0,1)} + \\
& 4 u'_{21} u'_{51} (u'_{52})^2 v'_2 v'_5 p_5^{(0,1)} p_2^{(1,0)} p_5^{(1,1)} p_0^{(0,1,0,0,1)} + 4 u'_{22} (u'_{51})^2 u'_{52} v'_2 v'_5 p_2^{(0,1)} p_5^{(1,1)} p_0^{(0,1,0,0,1)} + \\
& 4 u'_{21} u'_{22} u'_{51} u'_{52} v'_2 v'_5 p_2^{(1,1)} p_5^{(1,1)} p_0^{(0,1,0,0,1)} + 2 u'_{21} (u'_{22})^2 u'_{51} v'_2 v'_5 p_5^{(1,0)} p_2^{(1,2)} p_0^{(0,1,0,0,1)} + 2 u'_{21} u'_{51} (u'_{52})^2 v'_2 v'_5 p_2^{(1,0)} p_5^{(1,2)} p_0^{(0,1,0,0,1)} + \\
& (u'_{21})^2 (u'_{52})^2 v'_2 v'_5 (p_5^{(0,1)})^2 p_2^{(2,0)} p_0^{(0,1,0,0,1)} + (u'_{21})^2 v'_2 v'_5 u'_{52} p_5^{(0,1)} p_2^{(2,0)} p_0^{(0,1,0,0,1)} + 2 (u'_{21})^2 u'_{22} u'_{52} v'_2 v'_5 p_2^{(0,1)} p_5^{(0,1)} p_2^{(2,0)} p_0^{(0,1,0,0,1)} + \\
& (u'_{21})^2 (u'_{52})^2 v'_2 v'_5 p_5^{(0,2)} p_2^{(2,0)} p_0^{(0,1,0,0,1)} + (u'_{22})^2 (u'_{51})^2 v'_5 v'_2 (p_2^{(0,1)})^2 p_5^{(2,0)} p_0^{(0,1,0,0,1)} + (u'_{51})^2 v'_2 v'_5 u'_{22} p_2^{(0,1)} p_5^{(2,0)} p_0^{(0,1,0,0,1)} + \\
& 2 u'_{22} (u'_{51})^2 u'_{52} v'_2 v'_5 p_2^{(0,1)} p_5^{(0,1)} p_5^{(2,0)} p_0^{(0,1,0,0,1)} + (u'_{22})^2 (u'_{51})^2 v'_2 v'_5 p_2^{(0,2)} p_5^{(2,0)} p_0^{(0,1,0,0,1)} + 2 (u'_{21})^2 u'_{22} u'_{52} v'_2 v'_5 p_5^{(0,1)} p_2^{(2,1)} p_0^{(0,1,0,0,1)} + \\
& 2 u'_{22} (u'_{51})^2 u'_{52} v'_2 v'_5 p_2^{(0,1)} p_5^{(2,1)} p_0^{(0,1,0,0,1)} + (u'_{21})^2 (u'_{52})^2 (v'_5)^2 v'_2 (p_5^{(0,1)})^2 (p_2^{(1,0)})^2 p_0^{(0,1,0,0,2)} + \\
& (u'_{22})^2 (u'_{51})^2 (v'_5)^2 v'_2 (p_2^{(0,1)})^2 (p_5^{(1,0)})^2 p_0^{(0,1,0,0,2)} + (u'_{51})^2 v'_2 (v'_5)^2 u'_{22} p_2^{(0,1)} (p_5^{(1,0)})^2 p_0^{(0,1,0,0,2)} + \\
& 6 u'_{22} (u'_{51})^2 u'_{52} v'_2 v'_5 v'_5 p_2^{(0,1)} p_5^{(0,1)} (p_5^{(1,0)})^2 p_0^{(0,1,0,0,2)} + (u'_{22})^2 (u'_{51})^2 v'_2 (v'_5)^2 p_2^{(0,2)} (p_5^{(1,0)})^2 p_0^{(0,1,0,0,2)} + \\
& (u'_{52})^2 v'_2 (v'_5)^2 u'_{21} (p_5^{(0,1)})^2 p_2^{(1,0)} p_0^{(0,1,0,0,2)} + 2 u'_{22} u'_{52} v'_2 (v'_5)^2 u'_{51} p_2^{(0,1)} p_5^{(0,1)} p_5^{(1,0)} p_0^{(0,1,0,0,2)} + \\
& 6 u'_{21} u'_{51} (u'_{52})^2 v'_2 v'_5 v'_5 (p_5^{(0,1)})^2 p_2^{(1,0)} p_5^{(1,0)} p_0^{(0,1,0,0,2)} + 2 u'_{21} u'_{51} v'_2 (v'_5)^2 u'_{52} p_5^{(0,1)} p_2^{(1,0)} p_5^{(1,0)} p_0^{(0,1,0,0,2)} + \\
& 4 u'_{21} u'_{22} u'_{51} u'_{52} (v'_5)^2 v'_2 p_2^{(0,1)} p_5^{(0,1)} p_2^{(1,0)} p_5^{(1,0)} p_0^{(0,1,0,0,2)} + 2 u'_{21} u'_{51} (u'_{52})^2 v'_2 (v'_5)^2 p_5^{(0,2)} p_2^{(1,0)} p_5^{(1,0)} p_0^{(0,1,0,0,2)} + \\
& 4 u'_{21} u'_{22} u'_{51} u'_{52} v'_2 (v'_5)^2 p_5^{(0,1)} p_5^{(1,0)} p_2^{(1,1)} p_0^{(0,1,0,0,2)} + 4 u'_{21} u'_{51} (u'_{52})^2 v'_2 (v'_5)^2 p_5^{(0,1)} p_2^{(1,0)} p_5^{(1,1)} p_0^{(0,1,0,0,2)} + \\
& 4 u'_{22} (u'_{51})^2 u'_{52} v'_2 (v'_5)^2 p_2^{(0,1)} p_5^{(1,0)} p_5^{(1,1)} p_0^{(0,1,0,0,2)} + (u'_{21})^2 (u'_{52})^2 v'_2 (v'_5)^2 (p_5^{(0,1)})^2 p_2^{(2,0)} p_0^{(0,1,0,0,2)} + \\
& 2 u'_{22} (u'_{51})^2 u'_{52} v'_2 (v'_5)^2 p_2^{(0,1)} p_5^{(0,1)} p_5^{(2,0)} p_0^{(0,1,0,0,2)} + 2 u'_{22} (u'_{51})^2 u'_{52} v'_2 (v'_5)^3 p_2^{(0,1)} p_5^{(0,1)} (p_5^{(1,0)})^2 p_0^{(0,1,0,0,3)} + \\
& 2 u'_{21} u'_{51} (u'_{52})^2 v'_2 (v'_5)^3 (p_5^{(0,1)})^2 p_2^{(1,0)} p_5^{(1,0)} p_0^{(0,1,0,0,3)} + (u'_{21})^2 (u'_{42})^2 v'_2 v'_4 (p_4^{(0,1)})^2 (p_2^{(1,0)})^2 p_0^{(0,1,0,1,0)} + \\
& (u'_{21})^2 v'_4 u'_{42} v'_2 p_4^{(0,1)} (p_2^{(1,0)})^2 p_0^{(0,1,0,1,0)} + 2 (u'_{21})^2 u'_{22} u'_{42} v'_4 v'_2 p_2^{(0,1)} p_4^{(0,1)} (p_2^{(1,0)})^2 p_0^{(0,1,0,1,0)} + \\
& (u'_{21})^2 (u'_{42})^2 v'_4 v'_2 p_4^{(0,2)} (p_2^{(1,0)})^2 p_0^{(0,1,0,1,0)} + (u'_{22})^2 (u'_{41})^2 v'_2 v'_4 (p_2^{(0,1)})^2 (p_4^{(1,0)})^2 p_0^{(0,1,0,1,0)} + \\
& (u'_{41})^2 v'_2 u'_{22} v'_4 p_2^{(0,1)} (p_4^{(1,0)})^2 p_0^{(0,1,0,1,0)} + 2 u'_{22} (u'_{41})^2 u'_{42} v'_2 v'_4 p_2^{(0,1)} p_4^{(0,1)} (p_4^{(1,0)})^2 p_0^{(0,1,0,1,0)} + \\
& (u'_{22})^2 (u'_{41})^2 v'_2 v'_4 p_2^{(0,2)} (p_4^{(1,0)})^2 p_0^{(0,1,0,1,0)} + (u'_{42})^2 v'_2 u'_{21} v'_4 (p_4^{(0,1)})^2 p_2^{(1,0)} p_0^{(0,1,0,1,0)} + v'_2 v'_4 u'_{21} u'_{42} p_4^{(0,1)} p_2^{(1,0)} p_0^{(0,1,0,1,0)} + \\
& 2 u'_{22} u'_{42} v'_4 u'_{21} v'_2 p_2^{(0,1)} p_4^{(0,1)} p_2^{(1,0)} p_0^{(0,1,0,1,0)} + (u'_{42})^2 v'_2 v'_4 u'_{21} p_4^{(0,2)} p_2^{(1,0)} p_0^{(0,1,0,1,0)} + (u'_{22})^2 v'_4 u'_{41} v'_2 (p_2^{(0,1)})^2 p_4^{(1,0)} p_0^{(0,1,0,1,0)} + \\
& v'_2 v'_4 u'_{22} u'_{41} p_2^{(0,1)} p_4^{(1,0)} p_0^{(0,1,0,1,0)} + 2 u'_{22} u'_{42} v'_2 u'_{41} v'_4 p_2^{(0,1)} p_4^{(0,1)} p_4^{(1,0)} p_0^{(0,1,0,1,0)} + (u'_{22})^2 v'_2 v'_4 u'_{41} p_2^{(0,2)} p_4^{(1,0)} p_0^{(0,1,0,1,0)} + \\
& 2 u'_{21} (u'_{22})^2 u'_{41} v'_4 v'_2 (p_2^{(0,1)})^2 p_2^{(1,0)} p_4^{(1,0)} p_0^{(0,1,0,1,0)} + 2 u'_{21} u'_{41} (u'_{42})^2 v'_2 v'_4 (p_4^{(0,1)})^2 p_2^{(1,0)} p_4^{(1,0)} p_0^{(0,1,0,1,0)} + \\
& 2 u'_{21} u'_{41} v'_4 u'_{22} v'_2 p_2^{(0,1)} p_4^{(1,0)} p_0^{(0,1,0,1,0)} + 2 u'_{21} u'_{41} v'_2 u'_{42} v'_4 p_4^{(0,1)} p_2^{(1,0)} p_4^{(1,0)} p_0^{(0,1,0,1,0)} + \\
& 4 u'_{21} u'_{22} u'_{41} u'_{42} v'_2 v'_4 p_2^{(0,1)} p_4^{(0,1)} p_2^{(1,0)} p_4^{(1,0)} p_0^{(0,1,0,1,0)} + 2 u'_{21} (u'_{22})^2 u'_{41} v'_4 v'_2 p_2^{(0,2)} p_2^{(1,0)} p_4^{(1,0)} p_0^{(0,1,0,1,0)} + \\
& 2 u'_{21} u'_{41} (u'_{42})^2 v'_2 v'_4 p_4^{(0,2)} p_2^{(1,0)} p_4^{(1,0)} p_0^{(0,1,0,1,0)} + 2 u'_{22} u'_{42} v'_2 v'_4 u'_{21} p_4^{(0,1)} p_2^{(1,1)} p_0^{(0,1,0,1,0)} + \\
& 4 (u'_{21})^2 u'_{22} u'_{42} v'_4 v'_2 p_4^{(0,1)} p_2^{(1,1)} p_0^{(0,1,0,1,0)} + 2 u'_{21} u'_{41} v'_2 v'_4 u'_{22} p_4^{(1,0)} p_2^{(1,1)} p_0^{(0,1,0,1,0)} + \\
& 4 u'_{21} (u'_{22})^2 u'_{41} v'_4 v'_2 p_2^{(0,1)} p_4^{(1,0)} p_0^{(0,1,0,1,0)} + 4 u'_{21} u'_{22} u'_{41} u'_{42} v'_2 v'_4 p_4^{(0,1)} p_4^{(1,0)} p_2^{(1,1)} p_0^{(0,1,0,1,0)} + \\
& 2 u'_{22} u'_{42} v'_2 v'_4 u'_{41} p_2^{(0,1)} p_4^{(1,1)} p_0^{(0,1,0,1,0)} + 2 u'_{21} u'_{41} v'_2 v'_4 u'_{42} p_2^{(1,0)} p_4^{(1,1)} p_0^{(0,1,0,1,0)} + 4 u'_{21} u'_{22} u'_{41} u'_{42} v'_4 v'_2 p_2^{(0,1)} p_2^{(1,0)} p_4^{(1,1)} p_0^{(0,1,0,1,0)} + \\
& 4 u'_{21} u'_{41} (u'_{42})^2 v'_2 v'_4 p_4^{(0,1)} p_2^{(1,1)} p_0^{(0,1,0,1,0)} + 4 u'_{22} (u'_{41})^2 u'_{42} v'_2 v'_4 p_2^{(0,1)} p_4^{(1,1)} p_0^{(0,1,0,1,0)} + \\
& 4 u'_{21} u'_{22} u'_{41} u'_{42} v'_2 v'_4 p_2^{(1,1)} p_4^{(1,1)} p_0^{(0,1,0,1,0)} + 2 u'_{21} (u'_{22})^2 u'_{41} v'_2 v'_4 p_4^{(1,0)} p_2^{(1,2)} p_0^{(0,1,0,1,0)} + 2 u'_{21} u'_{41} (u'_{42})^2 v'_2 v'_4 p_2^{(1,0)} p_4^{(1,2)} p_0^{(0,1,0,1,0)} + \\
& (u'_{21})^2 (u'_{42})^2 v'_2 v'_4 (p_4^{(0,1)})^2 p_2^{(2,0)} p_0^{(0,1,0,1,0)} + (u'_{21})^2 v'_2 v'_4 u'_{42} p_4^{(0,1)} p_2^{(2,0)} p_0^{(0,1,0,1,0)} + 2 (u'_{21})^2 u'_{22} u'_{42} v'_2 v'_4 p_2^{(0,1)} p_4^{(0,1)} p_2^{(2,0)} p_0^{(0,1,0,1,0)} + \\
& (u'_{21})^2 (u'_{42})^2 v'_2 v'_4 p_4^{(0,2)} p_2^{(2,0)} p_0^{(0,1,0,1,0)} + (u'_{22})^2 (u'_{41})^2 v'_4 v'_2 (p_2^{(0,1)})^2 p_4^{(2,0)} p_0^{(0,1,0,1,0)} + (u'_{41})^2 v'_2 v'_4 u'_{22} p_2^{(0,1)} p_4^{(2,0)} p_0^{(0,1,0,1,0)} + \\
& 2 u'_{22} (u'_{41})^2 u'_{42} v'_2 v'_4 p_2^{(0,1)} p_4^{(2,0)} p_0^{(0,1,0,1,0)} + (u'_{22})^2 (u'_{41})^2 v'_2 v'_4 p_2^{(0,2)} p_4^{(2,0)} p_0^{(0,1,0,1,0)} + 2 (u'_{21})^2 u'_{22} u'_{42} v'_2 v'_4 p_4^{(0,1)} p_2^{(2,1)} p_0^{(0,1,0,1,0)} +
\end{aligned}$$

$$\begin{aligned}
& 2 u'_{22} (u'_{41})^2 u'_{42} v'_2 v'_4 p_2^{(0,1)} p_4^{(2,1)} p_0^{(0,1,0,1,0)} + 2 (u'_{21})^2 u'_{42} u'_{52} v'_2 v'_4 v'_5 v''_2 p_4^{(0,1)} p_5^{(0,1)} (p_2^{(1,0)})^2 p_0^{(0,1,0,1,1)} + \\
& 2 u'_{22} (u'_{41})^2 u'_{52} v'_2 v'_5 v'_4 p_2^{(0,1)} p_5^{(0,1)} (p_4^{(1,0)})^2 p_0^{(0,1,0,1,1)} + 2 u'_{22} u'_{42} (u'_{51})^2 v'_2 v'_4 v'_5 p_2^{(0,1)} p_4^{(0,1)} (p_5^{(1,0)})^2 p_0^{(0,1,0,1,1)} + \\
& 2 u'_{42} u'_{52} v'_2 v'_4 v'_5 u'_{21} p_4^{(0,1)} p_5^{(0,1)} p_2^{(1,0)} p_0^{(0,1,0,1,1)} + 2 u'_{22} u'_{52} v'_2 v'_4 v'_5 u'_{41} p_2^{(0,1)} p_5^{(0,1)} p_4^{(1,0)} p_0^{(0,1,0,1,1)} + \\
& 2 u'_{21} u'_{41} (u'_{52})^2 v'_2 v'_4 v'_5 (p_5^{(0,1)})^2 p_2^{(1,0)} p_4^{(1,0)} p_0^{(0,1,0,1,1)} + 2 u'_{21} u'_{41} v'_2 v'_4 v'_5 u'_{52} p_5^{(0,1)} p_2^{(1,0)} p_4^{(1,0)} p_0^{(0,1,0,1,1)} + \\
& 4 u'_{21} u'_{22} u'_{41} u'_{52} v'_2 v'_4 v'_5 v''_2 p_2^{(0,1)} p_5^{(0,1)} p_4^{(1,0)} p_0^{(0,1,0,1,1)} + 4 u'_{21} u'_{41} u'_{42} u'_{52} v'_2 v'_5 v'_4 p_4^{(0,1)} p_5^{(0,1)} p_2^{(1,0)} p_4^{(1,0)} p_0^{(0,1,0,1,1)} + \\
& 2 u'_{21} u'_{41} (u'_{52})^2 v'_2 v'_4 v'_5 p_5^{(0,2)} p_2^{(1,0)} p_4^{(1,0)} p_0^{(0,1,0,1,1)} + 2 u'_{22} u'_{42} v'_2 v'_4 v'_5 u'_{51} p_2^{(0,1)} p_4^{(0,1)} p_5^{(1,0)} p_0^{(0,1,0,1,1)} + \\
& 2 u'_{21} (u'_{42})^2 u'_{51} v'_2 v'_5 v'_4 (p_4^{(0,1)})^2 p_2^{(1,0)} p_5^{(1,0)} p_0^{(0,1,0,1,1)} + 2 u'_{21} u'_{51} v'_2 v'_4 v'_5 u'_{42} p_4^{(0,1)} p_2^{(1,0)} p_5^{(1,0)} p_0^{(0,1,0,1,1)} + \\
& 4 u'_{21} u'_{22} u'_{42} u'_{51} v'_2 v'_4 v'_5 v''_2 p_2^{(0,1)} p_4^{(0,1)} p_2^{(1,0)} p_5^{(1,0)} p_0^{(0,1,0,1,1)} + 4 u'_{21} u'_{42} u'_{51} u'_{52} v'_2 v'_4 v'_5 p_4^{(0,1)} p_5^{(0,1)} p_2^{(1,0)} p_5^{(1,0)} p_0^{(0,1,0,1,1)} + \\
& 2 u'_{21} (u'_{42})^2 u'_{51} v'_2 v'_4 v'_5 p_4^{(0,2)} p_2^{(1,0)} p_5^{(1,0)} p_0^{(0,1,0,1,1)} + 2 (u'_{22})^2 u'_{41} u'_{51} v'_2 v'_4 v'_5 v''_2 (p_2^{(0,1)})^2 p_4^{(1,0)} p_5^{(1,0)} p_0^{(0,1,0,1,1)} + \\
& 2 u'_{41} u'_{51} v'_2 v'_4 v'_5 u'_{22} p_2^{(0,1)} p_4^{(1,0)} p_5^{(1,0)} p_0^{(0,1,0,1,1)} + 4 u'_{22} u'_{41} u'_{42} u'_{51} v'_2 v'_5 v'_4 p_2^{(0,1)} p_4^{(0,1)} p_4^{(1,0)} p_5^{(1,0)} p_0^{(0,1,0,1,1)} + \\
& 4 u'_{22} u'_{41} u'_{51} u'_{52} v'_2 v'_4 v'_5 p_2^{(0,1)} p_5^{(0,1)} p_4^{(1,0)} p_5^{(1,0)} p_0^{(0,1,0,1,1)} + 2 (u'_{22})^2 u'_{41} u'_{51} v'_2 v'_4 v'_5 p_2^{(0,2)} p_4^{(1,0)} p_5^{(1,0)} p_0^{(0,1,0,1,1)} + \\
& 4 u'_{21} u'_{22} u'_{41} u'_{52} v'_2 v'_4 v'_5 p_5^{(0,1)} p_4^{(1,0)} p_2^{(1,1)} p_0^{(0,1,0,1,1)} + 4 u'_{21} u'_{22} u'_{42} u'_{51} v'_2 v'_4 v'_5 p_4^{(0,1)} p_5^{(1,0)} p_2^{(1,1)} p_0^{(0,1,0,1,1)} + \\
& 4 u'_{21} u'_{41} u'_{42} u'_{52} v'_2 v'_4 v'_5 p_5^{(0,1)} p_2^{(1,0)} p_4^{(1,1)} p_0^{(0,1,0,1,1)} + 4 u'_{22} u'_{41} u'_{42} u'_{51} v'_2 v'_4 v'_5 p_2^{(0,1)} p_5^{(1,0)} p_4^{(1,1)} p_0^{(0,1,0,1,1)} + \\
& 4 u'_{21} u'_{42} u'_{51} u'_{52} v'_2 v'_4 v'_5 p_4^{(0,1)} p_2^{(1,0)} p_5^{(1,1)} p_0^{(0,1,0,1,1)} + 4 u'_{22} u'_{41} u'_{51} u'_{52} v'_2 v'_4 v'_5 p_2^{(0,1)} p_4^{(1,0)} p_5^{(1,1)} p_0^{(0,1,0,1,1)} + \\
& 2 (u'_{21})^2 u'_{42} u'_{52} v'_2 v'_4 v'_5 p_4^{(0,1)} p_5^{(0,1)} p_2^{(2,0)} p_0^{(0,1,0,1,1)} + 2 u'_{22} (u'_{41})^2 u'_{52} v'_2 v'_4 v'_5 p_2^{(0,1)} p_5^{(0,1)} p_4^{(2,0)} p_0^{(0,1,0,1,1)} + \\
& 2 u'_{22} u'_{42} (u'_{51})^2 v'_2 v'_4 v'_5 p_2^{(0,1)} p_4^{(0,1)} p_5^{(2,0)} p_0^{(0,1,0,1,1)} + 2 u'_{22} u'_{42} (u'_{51})^2 v'_2 v'_4 (v'_5)^2 p_2^{(0,1)} p_4^{(0,1)} (p_5^{(1,0)})^2 p_0^{(0,1,0,1,2)} + \\
& 2 u'_{21} u'_{41} (u'_{52})^2 v'_2 v'_4 (v'_5)^2 (p_5^{(0,1)})^2 p_2^{(1,0)} p_4^{(1,0)} p_0^{(0,1,0,1,2)} + 4 u'_{21} u'_{42} u'_{51} u'_{52} v'_2 v'_4 (v'_5)^2 p_4^{(0,1)} p_5^{(0,1)} p_2^{(1,0)} p_5^{(1,0)} p_0^{(0,1,0,1,2)} + \\
& 4 u'_{22} u'_{41} u'_{51} u'_{52} v'_2 v'_4 (v'_5)^2 p_2^{(0,1)} p_5^{(0,1)} p_4^{(1,0)} p_5^{(1,0)} p_0^{(0,1,0,1,2)} + (u'_{21})^2 (u'_{42})^2 (v'_4)^2 v''_2 (p_4^{(0,1)})^2 (p_2^{(1,0)})^2 p_0^{(0,1,0,2,0)} + \\
& (u'_{22})^2 (u'_{41})^2 (v'_4)^2 v''_2 (p_2^{(0,1)})^2 (p_4^{(1,0)})^2 p_0^{(0,1,0,2,0)} + (u'_{41})^2 v'_2 (v'_4)^2 u'_{22} p_2^{(0,1)} (p_4^{(1,0)})^2 p_0^{(0,1,0,2,0)} + \\
& 6 u'_{22} (u'_{41})^2 u'_{42} v'_2 v'_4 v'_4 p_2^{(0,1)} p_4^{(0,1)} (p_4^{(1,0)})^2 p_0^{(0,1,0,2,0)} + (u'_{22})^2 (u'_{41})^2 v'_2 (v'_4)^2 p_2^{(0,2)} (p_4^{(1,0)})^2 p_0^{(0,1,0,2,0)} + \\
& (u'_{42})^2 v'_2 (v'_4)^2 u'_{21} (p_4^{(0,1)})^2 p_2^{(1,0)} p_0^{(0,1,0,2,0)} + 2 u'_{22} u'_{42} v'_2 (v'_4)^2 u'_{41} p_2^{(0,1)} p_4^{(0,1)} p_4^{(1,0)} p_0^{(0,1,0,2,0)} + \\
& 6 u'_{21} u'_{41} (u'_{42})^2 v'_2 v'_4 v'_4 (p_4^{(0,1)})^2 p_2^{(1,0)} p_4^{(1,0)} p_0^{(0,1,0,2,0)} + 2 u'_{21} u'_{41} v'_2 (v'_4)^2 u'_{42} p_4^{(0,1)} p_2^{(1,0)} p_4^{(1,0)} p_0^{(0,1,0,2,0)} + \\
& 4 u'_{21} u'_{22} u'_{41} u'_{42} (v'_4)^2 v''_2 p_2^{(0,1)} p_4^{(0,1)} p_2^{(1,0)} p_4^{(1,0)} p_0^{(0,1,0,2,0)} + 2 u'_{21} u'_{41} (u'_{42})^2 v'_2 (v'_4)^2 p_4^{(0,2)} p_2^{(1,0)} p_4^{(1,0)} p_0^{(0,1,0,2,0)} + \\
& 4 u'_{21} u'_{22} u'_{41} u'_{42} v'_2 (v'_4)^2 p_4^{(0,1)} p_4^{(1,0)} p_2^{(1,1)} p_0^{(0,1,0,2,0)} + 4 u'_{21} u'_{41} (u'_{42})^2 v'_2 (v'_4)^2 p_4^{(0,1)} p_2^{(1,0)} p_4^{(1,1)} p_0^{(0,1,0,2,0)} + \\
& 4 u'_{22} (u'_{41})^2 u'_{42} v'_2 (v'_4)^2 p_2^{(0,1)} p_4^{(1,0)} p_4^{(1,1)} p_0^{(0,1,0,2,0)} + (u'_{21})^2 (u'_{42})^2 v'_2 (v'_4)^2 (p_4^{(0,1)})^2 p_2^{(2,0)} p_0^{(0,1,0,2,0)} + \\
& 2 u'_{22} (u'_{41})^2 u'_{42} v'_2 (v'_4)^2 p_2^{(0,1)} p_4^{(0,1)} p_4^{(2,0)} p_0^{(0,1,0,2,0)} + 2 u'_{22} (u'_{41})^2 u'_{52} v'_2 (v'_4)^2 v'_5 p_2^{(0,1)} p_5^{(0,1)} (p_4^{(1,0)})^2 p_0^{(0,1,0,2,1)} + \\
& 4 u'_{21} u'_{41} u'_{42} u'_{52} v'_2 (v'_4)^2 v'_5 p_4^{(0,1)} p_5^{(0,1)} p_2^{(1,0)} p_4^{(1,0)} p_0^{(0,1,0,2,1)} + 2 u'_{21} (u'_{42})^2 u'_{51} v'_2 (v'_4)^2 v'_5 (p_4^{(0,1)})^2 p_2^{(1,0)} p_5^{(1,0)} p_0^{(0,1,0,2,1)} + \\
& 4 u'_{22} u'_{41} u'_{42} u'_{51} v'_2 (v'_4)^2 v'_5 p_2^{(0,1)} p_4^{(0,1)} p_4^{(1,0)} p_5^{(1,0)} p_0^{(0,1,0,2,1)} + 2 u'_{22} (u'_{41})^2 u'_{42} v'_2 (v'_4)^3 p_2^{(0,1)} p_4^{(0,1)} (p_4^{(1,0)})^2 p_0^{(0,1,0,3,0)} + \\
& 2 u'_{21} u'_{41} (u'_{42})^2 v'_2 (v'_4)^3 (p_4^{(0,1)})^2 p_2^{(1,0)} p_4^{(1,0)} p_0^{(0,1,0,3,0)} + (u'_{21})^2 (u'_{32})^2 v'_2 v'_3 v''_2 (p_3^{(0,1)})^2 (p_2^{(1,0)})^2 p_0^{(0,1,1,0,0)} + \\
& (u'_{21})^2 v'_3 u'_{32} v''_2 p_3^{(0,1)} (p_2^{(1,0)})^2 p_0^{(0,1,1,0,0)} + 2 (u'_{21})^2 u'_{22} u'_{32} v'_3 v''_2 p_2^{(0,1)} p_3^{(0,1)} (p_2^{(1,0)})^2 p_0^{(0,1,1,0,0)} + \\
& (u'_{21})^2 (u'_{32})^2 v'_2 v'_3 p_3^{(0,2)} (p_2^{(1,0)})^2 p_0^{(0,1,1,0,0)} + (u'_{22})^2 (u'_{31})^2 v'_2 v'_3 (p_2^{(0,1)})^2 (p_3^{(1,0)})^2 p_0^{(0,1,1,0,0)} + \\
& (u'_{31})^2 v'_2 u'_{22} v'_3 p_2^{(0,1)} (p_3^{(1,0)})^2 p_0^{(0,1,1,0,0)} + 2 u'_{22} (u'_{31})^2 u'_{32} v'_2 v'_3 p_2^{(0,1)} p_3^{(0,1)} (p_3^{(1,0)})^2 p_0^{(0,1,1,0,0)} + \\
& (u'_{22})^2 (u'_{31})^2 v'_2 v'_3 p_2^{(0,2)} (p_3^{(1,0)})^2 p_0^{(0,1,1,0,0)} + (u'_{32})^2 v'_2 u'_{21} v'_3 (p_3^{(0,1)})^2 p_2^{(1,0)} p_0^{(0,1,1,0,0)} + v'_2 v'_3 u'_{21} u'_{32} p_3^{(0,1)} p_2^{(1,0)} p_0^{(0,1,1,0,0)} + \\
& 2 u'_{22} u'_{32} v'_3 u'_{21} v'_2 p_2^{(0,1)} p_3^{(0,1)} p_2^{(1,0)} p_0^{(0,1,1,0,0)} + (u'_{32})^2 v'_2 v'_3 u'_{21} p_3^{(0,2)} p_2^{(1,0)} p_0^{(0,1,1,0,0)} + (u'_{22})^2 v'_3 u'_{31} v'_2 (p_2^{(0,1)})^2 p_3^{(1,0)} p_0^{(0,1,1,0,0)} + \\
& v'_2 v'_3 u'_{22} u'_{31} p_2^{(0,1)} p_3^{(1,0)} p_0^{(0,1,1,0,0)} + 2 u'_{22} u'_{32} v'_2 u'_{31} v'_3 p_2^{(0,1)} p_3^{(0,1)} p_3^{(1,0)} p_0^{(0,1,1,0,0)} + (u'_{22})^2 v'_2 v'_3 u'_{31} p_2^{(0,2)} p_3^{(1,0)} p_0^{(0,1,1,0,0)} + \\
& 2 u'_{21} (u'_{22})^2 u'_{31} v'_3 v''_2 (p_2^{(0,1)})^2 p_2^{(1,0)} p_3^{(1,0)} p_0^{(0,1,1,0,0)} + 2 u'_{21} u'_{31} (u'_{32})^2 v'_2 v'_3 (p_3^{(0,1)})^2 p_2^{(1,0)} p_3^{(1,0)} p_0^{(0,1,1,0,0)} + \\
& 2 u'_{21} u'_{31} v'_3 u'_{22} v'_2 p_2^{(0,1)} p_2^{(1,0)} p_3^{(1,0)} p_0^{(0,1,1,0,0)} + 2 u'_{21} u'_{31} v'_2 u'_{32} v'_3 p_3^{(0,1)} p_2^{(1,0)} p_3^{(1,0)} p_0^{(0,1,1,0,0)} + \\
& 4 u'_{21} u'_{22} u'_{31} u'_{32} v'_2 v'_3 p_2^{(0,1)} p_3^{(0,1)} p_2^{(1,0)} p_3^{(1,0)} p_0^{(0,1,1,0,0)} + 2 u'_{21} (u'_{22})^2 u'_{31} v'_3 v'_2 p_2^{(0,2)} p_2^{(1,0)} p_3^{(1,0)} p_0^{(0,1,1,0,0)} + \\
& 2 u'_{21} u'_{31} (u'_{32})^2 v'_2 v'_3 p_3^{(0,2)} p_2^{(1,0)} p_3^{(1,0)} p_0^{(0,1,1,0,0)} + 2 u'_{22} u'_{32} v'_2 v'_3 u'_{21} p_3^{(0,1)} p_2^{(1,1)} p_0^{(0,1,1,0,0)} + \\
& 4 (u'_{21})^2 u'_{22} u'_{32} v'_2 v'_3 p_3^{(0,1)} p_2^{(1,0)} p_2^{(1,1)} p_0^{(0,1,1,0,0)} + 2 u'_{21} u'_{31} v'_2 v'_3 u'_{22} p_3^{(1,0)} p_2^{(1,1)} p_0^{(0,1,1,0,0)} + \\
& 4 u'_{21} (u'_{22})^2 u'_{31} v'_3 v'_2 p_2^{(0,1)} p_3^{(1,0)} p_2^{(1,1)} p_0^{(0,1,1,0,0)} + 4 u'_{21} u'_{22} u'_{31} u'_{32} v'_2 v'_3 p_3^{(0,1)} p_3^{(1,0)} p_2^{(1,1)} p_0^{(0,1,1,0,0)} + \\
& 2 u'_{22} u'_{32} v'_2 v'_3 u'_{31} p_2^{(0,1)} p_3^{(1,1)} p_0^{(0,1,1,0,0)} + 2 u'_{21} u'_{31} v'_2 v'_3 u'_{32} p_2^{(1,0)} p_3^{(1,1)} p_0^{(0,1,1,0,0)} + 4 u'_{21} u'_{22} u'_{31} u'_{32} v'_2 v'_3 p_2^{(0,1)} p_2^{(1,0)} p_3^{(1,1)} p_0^{(0,1,1,0,0)} + \\
& 4 u'_{21} u'_{31} (u'_{32})^2 v'_2 v'_3 p_3^{(0,1)} p_2^{(1,0)} p_3^{(1,1)} p_0^{(0,1,1,0,0)} + 4 u'_{22} (u'_{31})^2 u'_{32} v'_2 v'_3 p_2^{(1,0)} p_3^{(1,2)} p_0^{(0,1,1,0,0)} + \\
& 4 u'_{21} u'_{22} u'_{31} u'_{32} v'_2 v'_3 p_2^{(1,1)} p_3^{(1,2)} p_0^{(0,1,1,0,0)} + 2 u'_{21} u'_{31} (u'_{32})^2 v'_2 v'_3 p_2^{(1,0)} p_3^{(1,2)} p_0^{(0,1,1,0,0)} + \\
& (u'_{21})^2 (u'_{32})^2 v'_2 v'_3 (p_3^{(0,1)})^2 p_2^{(2,0)} p_0^{(0,1,1,0,0)} + (u'_{21})^2 v'_2 v'_3 u'_{32} p_3^{(0,1)} p_2^{(2,0)} p_0^{(0,1,1,0,0)} + 2 (u'_{21})^2 u'_{22} u'_{32} v'_2 v'_3 p_2^{(0,1)} p_3^{(0,1)} p_2^{(2,0)} p_0^{(0,1,1,0,0)} +
\end{aligned}$$

$$\begin{aligned}
& (u'_{21})^2 (u'_{32})^2 v_2 v_3 p_3^{(2,0)} p_2^{(2,0)} p_0^{(0,1,1,0,0)} + (u'_{22})^2 (u'_{31})^2 v_3 v_2' (p_2^{(0,1)})^2 p_3^{(2,0)} p_0^{(0,1,1,0,0)} + (u'_{31})^2 v_2 v_3 u'_{22} p_2^{(0,1)} p_3^{(2,0)} p_0^{(0,1,1,0,0)} + \\
& 2 u'_{22} (u'_{31})^2 u'_{32} v_2 v_3' p_2^{(0,1)} p_3^{(0,1)} p_0^{(2,0)} p_0^{(0,1,1,0,0)} + (u'_{22})^2 (u'_{31})^2 v_2 v_3 p_2^{(2,0)} p_3^{(2,0)} p_0^{(0,1,1,0,0)} + 2 (u'_{21})^2 u'_{22} u'_{32} v_2 v_3 p_3^{(0,1)} p_2^{(2,1)} p_0^{(0,1,1,0,0)} + \\
& 2 u'_{22} (u'_{31})^2 u'_{32} v_2 v_3 p_2^{(0,1)} p_3^{(2,1)} p_0^{(0,1,1,0,0)} + 2 (u'_{21})^2 u'_{32} u'_{52} v_3 v_5 v_2' p_3^{(0,1)} p_5^{(0,1)} (p_2^{(1,0)})^2 p_0^{(0,1,1,0,1)} + \\
& 2 u'_{22} (u'_{31})^2 u'_{52} v_2 v_5 v_3' p_2^{(0,1)} p_5^{(0,1)} (p_3^{(1,0)})^2 p_0^{(0,1,1,0,1)} + 2 u'_{22} u'_{32} (u'_{51})^2 v_2 v_3 v_5' p_2^{(0,1)} p_3^{(0,1)} (p_5^{(1,0)})^2 p_0^{(0,1,1,0,1)} + \\
& 2 u'_{32} u'_{52} v_2 v_3 v_5 u'_{21} p_3^{(0,1)} p_5^{(0,1)} p_2^{(1,0)} p_0^{(0,1,1,0,1)} + 2 u'_{22} u'_{52} v_2 v_3 v_5 u'_{31} p_2^{(0,1)} p_5^{(0,1)} p_3^{(1,0)} p_0^{(0,1,1,0,1)} + \\
& 2 u'_{21} u'_{31} (u'_{52})^2 v_2 v_3 v_5' (p_5^{(0,1)})^2 p_2^{(1,0)} p_3^{(1,0)} p_0^{(0,1,1,0,1)} + 2 u'_{21} u'_{31} v_2 v_3 v_5 u'_{52} p_5^{(0,1)} p_2^{(1,0)} p_3^{(1,0)} p_0^{(0,1,1,0,1)} + \\
& 4 u'_{21} u'_{22} u'_{31} u'_{52} v_3 v_5 v_2' p_2^{(0,1)} p_5^{(0,1)} p_2^{(1,0)} p_3^{(1,0)} p_0^{(0,1,1,0,1)} + 4 u'_{21} u'_{31} u'_{32} u'_{52} v_2 v_3 v_5' p_3^{(0,1)} p_5^{(0,1)} p_2^{(1,0)} p_3^{(1,0)} p_0^{(0,1,1,0,1)} + \\
& 2 u'_{21} u'_{31} (u'_{52})^2 v_2 v_3 v_5 p_2^{(0,2)} p_2^{(1,0)} p_3^{(1,0)} p_0^{(0,1,1,0,1)} + 2 u'_{22} u'_{32} v_2 v_3 v_5 u'_{51} p_2^{(0,1)} p_3^{(0,1)} p_5^{(1,0)} p_0^{(0,1,1,0,1)} + \\
& 2 u'_{21} (u'_{32})^2 u'_{51} v_2 v_3 v_5' (p_3^{(0,1)})^2 p_2^{(1,0)} p_5^{(1,0)} p_0^{(0,1,1,0,1)} + 2 u'_{21} u'_{51} v_2 v_3 v_5 u'_{32} p_3^{(0,1)} p_2^{(1,0)} p_5^{(1,0)} p_0^{(0,1,1,0,1)} + \\
& 4 u'_{21} u'_{22} u'_{32} u'_{51} v_3 v_5 v_2' p_2^{(0,1)} p_3^{(0,1)} p_2^{(1,0)} p_5^{(1,0)} p_0^{(0,1,1,0,1)} + 4 u'_{21} u'_{32} u'_{51} u'_{52} v_2 v_3 v_5' p_3^{(0,1)} p_5^{(0,1)} p_2^{(1,0)} p_5^{(1,0)} p_0^{(0,1,1,0,1)} + \\
& 2 u'_{21} (u'_{32})^2 u'_{51} v_2 v_3 v_5 p_3^{(0,2)} p_2^{(1,0)} p_5^{(1,0)} p_0^{(0,1,1,0,1)} + 2 (u'_{22})^2 u'_{31} u'_{51} v_3 v_5 v_2' (p_2^{(0,1)})^2 p_3^{(1,0)} p_5^{(1,0)} p_0^{(0,1,1,0,1)} + \\
& 2 u'_{31} u'_{51} v_2 v_3 v_5 u'_{22} p_2^{(0,1)} p_3^{(1,0)} p_5^{(1,0)} p_0^{(0,1,1,0,1)} + 4 u'_{22} u'_{31} u'_{32} u'_{51} v_2 v_3 v_5' p_2^{(0,1)} p_3^{(0,1)} p_5^{(1,0)} p_0^{(0,1,1,0,1)} + \\
& 4 u'_{22} u'_{31} u'_{51} u'_{52} v_2 v_3 v_5' p_2^{(0,1)} p_5^{(1,0)} p_3^{(1,0)} p_0^{(0,1,1,0,1)} + 2 (u'_{22})^2 u'_{31} u'_{51} v_2 v_3 v_5 p_2^{(0,2)} p_3^{(1,0)} p_5^{(1,0)} p_0^{(0,1,1,0,1)} + \\
& 4 u'_{21} u'_{22} u'_{31} u'_{52} v_2 v_3 v_5 p_5^{(0,1)} p_2^{(1,1)} p_0^{(0,1,1,0,1)} + 4 u'_{21} u'_{22} u'_{32} u'_{51} v_2 v_3 v_5 p_3^{(0,1)} p_5^{(1,0)} p_2^{(1,1)} p_0^{(0,1,1,0,1)} + \\
& 4 u'_{21} u'_{31} u'_{32} u'_{52} v_2 v_3 v_5 p_5^{(0,1)} p_2^{(1,0)} p_3^{(1,1)} p_0^{(0,1,1,0,1)} + 4 u'_{22} u'_{31} u'_{32} u'_{51} v_2 v_3 v_5 p_2^{(0,1)} p_5^{(1,0)} p_3^{(1,1)} p_0^{(0,1,1,0,1)} + \\
& 4 u'_{21} u'_{32} u'_{51} u'_{52} v_2 v_3 v_5 p_3^{(0,1)} p_5^{(1,1)} p_0^{(0,1,1,0,1)} + 4 u'_{22} u'_{31} u'_{51} u'_{52} v_2 v_3 v_5 p_2^{(0,1)} p_3^{(1,0)} p_5^{(1,1)} p_0^{(0,1,1,0,1)} + \\
& 2 (u'_{21})^2 u'_{32} u'_{52} v_2 v_3 v_5 p_3^{(0,1)} p_5^{(2,0)} p_2^{(0,1)} p_0^{(0,1,1,0,1)} + 2 u'_{22} (u'_{31})^2 u'_{52} v_2 v_3 v_5 p_2^{(0,1)} p_5^{(0,1)} p_3^{(2,0)} p_0^{(0,1,1,0,1)} + \\
& 2 u'_{22} u'_{32} (u'_{51})^2 v_2 v_3 v_5 p_2^{(0,1)} p_3^{(0,1)} p_5^{(2,0)} p_0^{(0,1,1,0,1)} + 2 u'_{22} u'_{32} (u'_{51})^2 v_2 v_3 (v_5)^2 p_2^{(0,1)} p_3^{(0,1)} (p_5^{(1,0)})^2 p_0^{(0,1,1,0,2)} + \\
& 2 u'_{21} u'_{31} (u'_{52})^2 v_2 v_3 (v_5)^2 (p_5^{(0,1)})^2 p_2^{(1,0)} p_3^{(1,0)} p_0^{(0,1,1,0,2)} + 4 u'_{21} u'_{32} u'_{51} u'_{52} v_2 v_3 (v_5)^2 p_3^{(0,1)} p_5^{(0,1)} p_2^{(1,0)} p_5^{(1,0)} p_0^{(0,1,1,0,2)} + \\
& 4 u'_{22} u'_{31} u'_{51} u'_{52} v_2 v_3 (v_5)^2 p_2^{(0,1)} p_5^{(0,1)} p_3^{(1,0)} p_5^{(1,0)} p_0^{(0,1,1,0,2)} + 2 (u'_{21})^2 u'_{32} u'_{42} v_3 v_4 v_2' p_3^{(0,1)} p_4^{(0,1)} (p_2^{(1,0)})^2 p_0^{(0,1,1,0,1)} + \\
& 2 u'_{22} (u'_{31})^2 u'_{42} v_2 v_4 v_3' p_2^{(0,1)} p_4^{(0,1)} (p_3^{(1,0)})^2 p_0^{(0,1,1,1,0)} + 2 u'_{22} u'_{32} (u'_{41})^2 v_2 v_3 v_4' p_2^{(0,1)} p_3^{(0,1)} (p_4^{(1,0)})^2 p_0^{(0,1,1,1,0)} + \\
& 2 u'_{32} u'_{42} v_2 v_3 v_4 u'_{21} p_3^{(0,1)} p_4^{(0,1)} p_2^{(1,0)} p_0^{(0,1,1,1,0)} + 2 u'_{22} u'_{42} v_2 v_3 v_4 u'_{31} p_2^{(0,1)} p_4^{(0,1)} p_3^{(1,0)} p_0^{(0,1,1,1,0)} + \\
& 2 u'_{21} u'_{31} (u'_{42})^2 v_2 v_3 v_4' (p_4^{(0,1)})^2 p_2^{(1,0)} p_3^{(1,0)} p_0^{(0,1,1,1,0)} + 2 u'_{21} u'_{31} v_2 v_3 v_4 u'_{42} p_4^{(0,1)} p_2^{(1,0)} p_3^{(1,0)} p_0^{(0,1,1,1,0)} + \\
& 4 u'_{21} u'_{22} u'_{31} u'_{42} v_3 v_4 v_2' p_2^{(0,1)} p_4^{(0,1)} p_2^{(1,0)} p_3^{(1,0)} p_0^{(0,1,1,1,0)} + 4 u'_{21} u'_{31} u'_{32} u'_{42} v_2 v_4 v_3' p_3^{(0,1)} p_4^{(0,1)} p_2^{(1,0)} p_3^{(1,0)} p_0^{(0,1,1,1,0)} + \\
& 2 u'_{21} u'_{31} (u'_{42})^2 v_2 v_3 v_4 p_4^{(0,2)} p_2^{(1,0)} p_3^{(1,0)} p_0^{(0,1,1,1,0)} + 2 u'_{22} u'_{32} v_2 v_3 v_4 u'_{41} p_2^{(0,1)} p_3^{(0,1)} p_4^{(1,0)} p_0^{(0,1,1,1,0)} + \\
& 2 u'_{21} (u'_{32})^2 u'_{41} v_2 v_4 v_3' (p_3^{(0,1)})^2 p_2^{(1,0)} p_4^{(1,0)} p_0^{(0,1,1,1,0)} + 2 u'_{21} u'_{41} v_2 v_3 v_4 u'_{32} p_3^{(0,1)} p_2^{(1,0)} p_4^{(1,0)} p_0^{(0,1,1,1,0)} + \\
& 4 u'_{21} u'_{22} u'_{32} u'_{41} v_3 v_4 v_2' p_2^{(0,1)} p_3^{(0,1)} p_2^{(1,0)} p_4^{(1,0)} p_0^{(0,1,1,1,0)} + 4 u'_{21} u'_{32} u'_{41} u'_{42} v_2 v_3 v_4' p_3^{(0,1)} p_4^{(0,1)} p_2^{(1,0)} p_4^{(1,0)} p_0^{(0,1,1,1,0)} + \\
& 2 u'_{21} (u'_{32})^2 u'_{41} v_2 v_3 v_4 p_3^{(0,2)} p_2^{(1,0)} p_4^{(1,0)} p_0^{(0,1,1,1,0)} + 2 (u'_{22})^2 u'_{31} u'_{41} v_3 v_4 v_2' (p_2^{(0,1)})^2 p_3^{(1,0)} p_4^{(1,0)} p_0^{(0,1,1,1,0)} + \\
& 2 u'_{31} u'_{41} v_2 v_3 v_4 u'_{22} p_2^{(0,1)} p_3^{(1,0)} p_4^{(1,0)} p_0^{(0,1,1,1,0)} + 4 u'_{22} u'_{31} u'_{32} u'_{41} v_2 v_4 v_3' p_2^{(0,1)} p_3^{(0,1)} p_4^{(1,0)} p_0^{(0,1,1,1,0)} + \\
& 4 u'_{22} u'_{31} u'_{41} u'_{42} v_2 v_3 v_4' p_2^{(0,1)} p_3^{(1,0)} p_4^{(1,0)} p_0^{(0,1,1,1,0)} + 2 (u'_{22})^2 u'_{31} u'_{41} v_2 v_3 v_4 p_2^{(0,2)} p_3^{(1,0)} p_4^{(1,0)} p_0^{(0,1,1,1,0)} + \\
& 4 u'_{21} u'_{22} u'_{31} u'_{42} v_2 v_3 v_4 p_4^{(0,1)} p_3^{(1,0)} p_2^{(1,1)} p_0^{(0,1,1,1,0)} + 4 u'_{21} u'_{22} u'_{32} u'_{41} v_2 v_3 v_4 p_3^{(0,1)} p_4^{(1,0)} p_2^{(1,1)} p_0^{(0,1,1,1,0)} + \\
& 4 u'_{21} u'_{31} u'_{32} u'_{42} v_2 v_3 v_4 p_4^{(0,1)} p_2^{(1,0)} p_3^{(1,1)} p_0^{(0,1,1,1,0)} + 4 u'_{22} u'_{31} u'_{32} u'_{41} v_2 v_3 v_4 p_2^{(0,1)} p_4^{(1,0)} p_3^{(1,1)} p_0^{(0,1,1,1,0)} + \\
& 4 u'_{21} u'_{32} u'_{41} u'_{42} v_2 v_3 v_4 p_3^{(0,1)} p_2^{(1,0)} p_4^{(1,1)} p_0^{(0,1,1,1,0)} + 4 u'_{22} u'_{31} u'_{41} u'_{42} v_2 v_3 v_4 p_2^{(0,1)} p_3^{(1,0)} p_4^{(1,1)} p_0^{(0,1,1,1,0)} + \\
& 2 (u'_{21})^2 u'_{32} u'_{42} v_2 v_3 v_4 p_3^{(0,1)} p_4^{(2,0)} p_2^{(0,1)} p_0^{(0,1,1,1,0)} + 2 u'_{22} (u'_{31})^2 u'_{42} v_2 v_3 v_4 p_2^{(0,1)} p_4^{(0,1)} p_3^{(2,0)} p_0^{(0,1,1,1,0)} + \\
& 2 u'_{22} u'_{32} (u'_{41})^2 v_2 v_3 v_4 p_2^{(0,1)} p_3^{(0,1)} p_4^{(2,0)} p_0^{(0,1,1,1,0)} + 4 u'_{21} u'_{31} u'_{42} u'_{52} v_2 v_3 v_4 v_5 p_4^{(0,1)} p_5^{(0,1)} p_2^{(1,0)} p_3^{(1,0)} p_0^{(0,1,1,1,1)} + \\
& 4 u'_{21} u'_{32} u'_{41} u'_{52} v_2 v_3 v_4 v_5 p_3^{(0,1)} p_5^{(0,1)} p_2^{(1,0)} p_4^{(1,0)} p_0^{(0,1,1,1,1)} + 4 u'_{22} u'_{31} u'_{41} u'_{52} v_2 v_3 v_4 v_5 p_2^{(0,1)} p_5^{(0,1)} p_3^{(1,0)} p_4^{(1,0)} p_0^{(0,1,1,1,1)} + \\
& 4 u'_{21} u'_{32} u'_{42} u'_{51} v_2 v_3 v_4 v_5 p_3^{(0,1)} p_4^{(0,1)} p_2^{(1,0)} p_5^{(1,0)} p_0^{(0,1,1,1,1)} + 4 u'_{22} u'_{31} u'_{42} u'_{51} v_2 v_3 v_4 v_5 p_2^{(0,1)} p_4^{(0,1)} p_3^{(1,0)} p_5^{(1,0)} p_0^{(0,1,1,1,1)} + \\
& 4 u'_{22} u'_{32} u'_{41} u'_{51} v_2 v_3 v_4 v_5 p_2^{(0,1)} p_3^{(0,1)} p_4^{(1,0)} p_5^{(1,0)} p_0^{(0,1,1,1,1)} + 2 u'_{22} u'_{32} (u'_{41})^2 v_2 v_3 (v_4)^2 p_2^{(0,1)} p_3^{(0,1)} (p_4^{(1,0)})^2 p_0^{(0,1,1,2,0)} + \\
& 2 u'_{21} u'_{31} (u'_{42})^2 v_2 v_3 (v_4)^2 (p_4^{(0,1)})^2 p_2^{(1,0)} p_3^{(1,0)} p_0^{(0,1,1,2,0)} + 4 u'_{21} u'_{32} u'_{41} u'_{42} v_2 v_3 (v_4)^2 p_3^{(0,1)} p_4^{(0,1)} p_2^{(1,0)} p_4^{(1,0)} p_0^{(0,1,1,2,0)} + \\
& 4 u'_{22} u'_{31} u'_{41} u'_{42} v_2 v_3 (v_4)^2 p_2^{(0,1)} p_4^{(0,1)} p_3^{(1,0)} p_4^{(1,0)} p_0^{(0,1,1,2,0)} + (u'_{21})^2 (u'_{32})^2 (v_3)^2 v_2' (p_3^{(0,1)})^2 (p_2^{(1,0)})^2 p_0^{(0,1,2,0,0)} + \\
& (u'_{22})^2 (u'_{31})^2 (v_3)^2 v_2' (p_2^{(0,1)})^2 (p_3^{(1,0)})^2 p_0^{(0,1,2,0,0)} + (u'_{31})^2 v_2 (v_3)^2 u'_{22} p_2^{(0,1)} (p_3^{(1,0)})^2 p_0^{(0,1,2,0,0)} + \\
& 6 u'_{22} (u'_{31})^2 u'_{32} v_2 v_3 v_3' p_2^{(0,1)} p_3^{(0,1)} (p_3^{(1,0)})^2 p_0^{(0,1,2,0,0)} + (u'_{22})^2 (u'_{31})^2 v_2 (v_3)^2 p_2^{(0,2)} (p_3^{(1,0)})^2 p_0^{(0,1,2,0,0)} + \\
& (u'_{32})^2 v_2 (v_3)^2 u'_{21} (p_3^{(0,1)})^2 p_2^{(1,0)} p_0^{(0,1,2,0,0)} + 2 u'_{22} u'_{32} v_2 (v_3)^2 u'_{31} p_2^{(0,1)} p_3^{(0,1)} p_0^{(0,1,2,0,0)} + \\
& 6 u'_{21} u'_{31} (u'_{32})^2 v_2 v_3 v_3' (p_3^{(0,1)})^2 p_2^{(1,0)} p_3^{(1,0)} p_0^{(0,1,2,0,0)} + 2 u'_{21} u'_{31} v_2 (v_3)^2 u'_{32} p_3^{(0,1)} p_2^{(1,0)} p_3^{(1,0)} p_0^{(0,1,2,0,0)} + \\
& 4 u'_{21} u'_{22} u'_{31} u'_{32} (v_3)^2 v_2' p_2^{(0,1)} p_3^{(0,1)} p_2^{(1,0)} p_3^{(1,0)} p_0^{(0,1,2,0,0)} + 2 u'_{21} u'_{31} (u'_{32})^2 v_2 (v_3)^2 p_3^{(0,2)} p_2^{(1,0)} p_3^{(1,0)} p_0^{(0,1,2,0,0)} + \\
& 4 u'_{21} u'_{22} u'_{31} u'_{32} v_2 (v_3)^2 p_3^{(0,1)} p_3^{(1,0)} p_2^{(1,1)} p_0^{(0,1,2,0,0)} + 4 u'_{21} u'_{31} (u'_{32})^2 v_2 (v_3)^2 p_3^{(0,1)} p_2^{(1,0)} p_3^{(1,1)} p_0^{(0,1,2,0,0)} +
\end{aligned}$$

$$\begin{aligned}
& 4 u'_{22} (u'_{31})^2 u'_{32} v'_2 (v'_3)^2 p_2^{(0,1)} p_3^{(1,0)} p_3^{(1,1)} p_0^{(0,1,2,0,0)} + (u'_{21})^2 (u'_{32})^2 v'_2 (v'_3)^2 (p_3^{(0,1)})^2 p_2^{(2,0)} p_0^{(0,1,2,0,0)} + \\
& 2 u'_{22} (u'_{31})^2 u'_{32} v'_2 (v'_3)^2 p_2^{(0,1)} p_3^{(0,1)} p_3^{(2,0)} p_0^{(0,1,2,0,0)} + 2 u'_{22} (u'_{31})^2 u'_{52} v'_2 (v'_3)^2 v'_5 p_2^{(0,1)} p_5^{(0,1)} (p_3^{(1,0)})^2 p_0^{(0,1,2,0,1)} + \\
& 4 u'_{21} u'_{31} u'_{32} u'_{52} v'_2 (v'_3)^2 v'_5 p_3^{(0,1)} p_5^{(0,1)} p_2^{(1,0)} p_3^{(1,0)} p_0^{(0,1,2,0,1)} + 2 u'_{21} (u'_{32})^2 u'_{51} v'_2 (v'_3)^2 v'_5 (p_3^{(0,1)})^2 p_2^{(1,0)} p_5^{(1,0)} p_0^{(0,1,2,0,1)} + \\
& 4 u'_{22} u'_{31} u'_{32} u'_{51} v'_2 (v'_3)^2 v'_5 p_2^{(0,1)} p_3^{(0,1)} p_3^{(1,0)} p_5^{(1,0)} p_0^{(0,1,2,0,1)} + 2 u'_{22} (u'_{31})^2 u'_{42} v'_2 (v'_3)^2 v'_4 p_2^{(0,1)} p_4^{(0,1)} (p_3^{(1,0)})^2 p_0^{(0,1,2,1,0)} + \\
& 4 u'_{21} u'_{31} u'_{32} u'_{42} v'_2 (v'_3)^2 v'_4 p_3^{(0,1)} p_4^{(1,0)} p_2^{(1,0)} p_3^{(1,0)} p_0^{(0,1,2,1,0)} + 2 u'_{21} (u'_{32})^2 u'_{41} v'_2 (v'_3)^2 v'_4 (p_3^{(0,1)})^2 p_2^{(1,0)} p_4^{(1,0)} p_0^{(0,1,2,1,0)} + \\
& 4 u'_{22} u'_{31} u'_{32} u'_{41} v'_2 (v'_3)^2 v'_4 p_2^{(0,1)} p_3^{(0,1)} p_3^{(1,0)} p_4^{(1,0)} p_0^{(0,1,2,1,0)} + 2 u'_{22} (u'_{31})^2 u'_{32} v'_2 (v'_3)^3 p_2^{(0,1)} p_3^{(0,1)} (p_3^{(1,0)})^2 p_0^{(0,1,3,0,0)} + \\
& 2 u'_{21} u'_{31} (u'_{32})^2 v'_2 (v'_3)^3 (p_3^{(0,1)})^2 p_2^{(1,0)} p_3^{(1,0)} p_0^{(0,1,3,0,0)} + 3 (u'_{21})^2 (u'_{22})^2 (v'_2)^2 (p_2^{(0,1)})^2 (p_2^{(1,0)})^2 p_0^{(0,2,0,0,0)} + \\
& 4 (u'_{21})^2 (u'_{22})^2 v'_2 v'_3 (p_2^{(0,1)})^2 (p_2^{(1,0)})^2 p_0^{(0,2,0,0,0)} + 3 (u'_{21})^2 v'_2 u''_{22} v''_2 p_2^{(0,1)} (p_2^{(1,0)})^2 p_0^{(0,2,0,0,0)} + \\
& 3 (u'_{21})^2 (u'_{22})^2 v'_2 v''_2 p_2^{(0,2)} (p_2^{(1,0)})^2 p_0^{(0,2,0,0,0)} + 2 (u'_{21})^2 (u'_{22})^2 (v'_2)^2 (p_2^{(1,1)})^2 p_0^{(0,2,0,0,0)} + 3 (u'_{22})^2 v'_2 u'_{21} v'_2 (p_2^{(0,1)})^2 p_2^{(1,0)} p_0^{(0,2,0,0,0)} + \\
& (v'_2)^2 u''_{21} u''_{22} p_2^{(0,1)} p_2^{(1,0)} p_0^{(0,2,0,0,0)} + (u'_{22})^2 (v'_2)^2 u'_{21} p_2^{(0,2)} p_2^{(1,0)} p_0^{(0,2,0,0,0)} + 2 (u'_{22})^2 (v'_2)^2 u'_{21} p_2^{(0,1)} p_2^{(1,1)} p_0^{(0,2,0,0,0)} + \\
& 2 (u'_{21})^2 (v'_2)^2 u'_{22} p_2^{(1,0)} p_2^{(1,1)} p_0^{(0,2,0,0,0)} + 12 (u'_{21})^2 (u'_{22})^2 v'_2 v'_2 p_2^{(0,1)} p_2^{(1,0)} p_2^{(1,1)} p_0^{(0,2,0,0,0)} + 2 (u'_{21})^2 (u'_{22})^2 (v'_2)^2 p_2^{(0,2)} p_2^{(1,2)} p_0^{(0,2,0,0,0)} + \\
& 3 (u'_{21})^2 (u'_{22})^2 v'_2 v'_2 (p_2^{(0,1)})^2 p_2^{(2,0)} p_0^{(0,2,0,0,0)} + (u'_{21})^2 (v'_2)^2 u'_{22} p_2^{(0,1)} p_2^{(2,0)} p_0^{(0,2,0,0,0)} + (u'_{21})^2 (u'_{22})^2 (v'_2)^2 p_2^{(0,2)} p_2^{(2,0)} p_0^{(0,2,0,0,0)} + \\
& 2 (u'_{21})^2 (u'_{22})^2 (v'_2)^2 p_2^{(0,1)} p_2^{(2,1)} p_0^{(0,2,0,0,0)} + (u'_{21})^2 (u'_{52})^2 (v'_2)^2 v''_5 (p_5^{(0,1)})^2 (p_2^{(1,0)})^2 p_0^{(0,2,0,0,1)} + (u'_{21})^2 (v'_2)^2 v'_5 u''_{52} p_5^{(0,1)} (p_2^{(1,0)})^2 p_0^{(0,2,0,0,1)} + \\
& 6 (u'_{21})^2 u'_{22} u'_{52} v'_2 v'_5 v''_2 p_2^{(0,1)} p_5^{(0,1)} (p_2^{(1,0)})^2 p_0^{(0,2,0,0,1)} + (u'_{21})^2 (u'_{52})^2 (v'_2)^2 v'_5 p_5^{(0,2)} (p_2^{(1,0)})^2 p_0^{(0,2,0,0,1)} + \\
& (u'_{22})^2 (u'_{51})^2 (v'_2)^2 v''_5 (p_5^{(0,1)})^2 (p_2^{(1,0)})^2 p_0^{(0,2,0,0,1)} + 2 u'_{22} u'_{52} (v'_2)^2 v'_5 u'_{21} p_2^{(0,1)} p_5^{(0,1)} p_2^{(1,0)} p_0^{(0,2,0,0,1)} + \\
& (u'_{22})^2 (v'_2)^2 v'_5 u'_{51} (p_2^{(0,1)})^2 p_5^{(1,0)} p_0^{(0,2,0,0,1)} + 6 u'_{21} (u'_{22})^2 u'_{51} v'_2 v'_5 v''_2 (p_2^{(0,1)})^2 p_2^{(1,0)} p_5^{(1,0)} p_0^{(0,2,0,0,1)} + \\
& 2 u'_{21} u'_{51} (v'_2)^2 v'_5 u'_{22} p_2^{(0,1)} p_2^{(1,0)} p_5^{(1,0)} p_0^{(0,2,0,0,1)} + 4 u'_{21} u'_{22} u'_{51} u'_{52} (v'_2)^2 v'_5 p_2^{(0,1)} p_5^{(0,1)} p_2^{(1,0)} p_5^{(1,0)} p_0^{(0,2,0,0,1)} + \\
& 2 u'_{21} (u'_{22})^2 u'_{51} (v'_2)^2 v'_5 p_2^{(0,2)} p_2^{(1,0)} p_5^{(1,0)} p_0^{(0,2,0,0,1)} + 4 (u'_{21})^2 u'_{22} u'_{52} (v'_2)^2 v'_5 p_5^{(0,1)} p_2^{(1,0)} p_2^{(1,1)} p_0^{(0,2,0,0,1)} + \\
& 4 u'_{21} (u'_{22})^2 u'_{51} (v'_2)^2 v'_5 p_2^{(0,1)} p_5^{(1,0)} p_2^{(1,1)} p_0^{(0,2,0,0,1)} + 4 u'_{21} u'_{22} u'_{51} u'_{52} (v'_2)^2 v'_5 p_2^{(0,1)} p_2^{(1,0)} p_5^{(1,1)} p_0^{(0,2,0,0,1)} + \\
& 2 (u'_{21})^2 u'_{22} u'_{52} (v'_2)^2 v'_5 p_2^{(0,1)} p_5^{(0,1)} p_2^{(2,0)} p_0^{(0,2,0,0,1)} + (u'_{22})^2 (u'_{51})^2 (v'_2)^2 v'_5 (p_2^{(0,1)})^2 p_5^{(2,0)} p_0^{(0,2,0,0,1)} + \\
& (u'_{21})^2 (u'_{52})^2 (v'_2)^2 (v'_5)^2 (p_5^{(0,1)})^2 (p_2^{(1,0)})^2 p_0^{(0,2,0,0,2)} + (u'_{22})^2 (u'_{51})^2 (v'_2)^2 (v'_5)^2 (p_2^{(0,1)})^2 (p_5^{(1,0)})^2 p_0^{(0,2,0,0,2)} + \\
& 4 u'_{21} u'_{22} u'_{51} u'_{52} (v'_2)^2 (v'_5)^2 p_2^{(0,1)} p_5^{(0,1)} p_2^{(1,0)} p_5^{(1,0)} p_0^{(0,2,0,0,2)} + (u'_{21})^2 (u'_{42})^2 (v'_2)^2 v''_4 (p_4^{(0,1)})^2 (p_2^{(1,0)})^2 p_0^{(0,2,0,1,0)} + \\
& (u'_{21})^2 (v'_2)^2 v'_4 u'_{42} p_4^{(0,1)} (p_2^{(1,0)})^2 p_0^{(0,2,0,1,0)} + 6 (u'_{21})^2 u'_{22} u'_{42} v'_2 v'_4 v''_2 p_2^{(0,1)} p_4^{(0,1)} (p_2^{(1,0)})^2 p_0^{(0,2,0,1,0)} + \\
& (u'_{21})^2 (u'_{42})^2 (v'_2)^2 v'_4 p_4^{(0,2)} (p_2^{(1,0)})^2 p_0^{(0,2,0,1,0)} + (u'_{22})^2 (u'_{41})^2 (v'_2)^2 v''_4 (p_2^{(0,1)})^2 (p_4^{(1,0)})^2 p_0^{(0,2,0,1,0)} + \\
& 2 u'_{22} u'_{42} (v'_2)^2 v'_4 u'_{21} p_2^{(0,1)} p_4^{(0,1)} p_2^{(1,0)} p_0^{(0,2,0,1,0)} + (u'_{22})^2 (v'_2)^2 v'_4 u'_{41} (p_2^{(0,1)})^2 p_4^{(1,0)} p_0^{(0,2,0,1,0)} + \\
& 6 u'_{21} (u'_{22})^2 u'_{41} v'_2 v'_4 v''_2 (p_2^{(0,1)})^2 p_2^{(1,0)} p_4^{(1,0)} p_0^{(0,2,0,1,0)} + 2 u'_{21} u'_{41} (v'_2)^2 v'_4 u'_{22} p_2^{(0,1)} p_2^{(1,0)} p_4^{(1,0)} p_0^{(0,2,0,1,0)} + \\
& 4 u'_{21} u'_{22} u'_{41} u'_{42} (v'_2)^2 v'_4 p_2^{(0,1)} p_4^{(1,0)} p_2^{(1,0)} p_4^{(1,0)} p_0^{(0,2,0,1,0)} + 2 u'_{21} (u'_{22})^2 u'_{41} (v'_2)^2 v'_4 p_2^{(0,2)} p_2^{(1,0)} p_4^{(1,0)} p_0^{(0,2,0,1,0)} + \\
& 4 (u'_{21})^2 u'_{22} u'_{42} (v'_2)^2 v'_4 p_4^{(0,1)} p_2^{(1,0)} p_2^{(1,1)} p_0^{(0,2,0,1,0)} + 4 u'_{21} (u'_{22})^2 u'_{41} (v'_2)^2 v'_4 p_2^{(0,1)} p_4^{(1,0)} p_2^{(1,1)} p_0^{(0,2,0,1,0)} + \\
& 4 u'_{21} u'_{22} u'_{41} u'_{42} (v'_2)^2 v'_4 p_2^{(0,1)} p_2^{(1,0)} p_4^{(1,1)} p_0^{(0,2,0,1,0)} + 2 (u'_{21})^2 u'_{22} u'_{42} (v'_2)^2 v'_4 p_2^{(0,1)} p_4^{(0,1)} p_2^{(2,0)} p_0^{(0,2,0,1,0)} + \\
& (u'_{22})^2 (u'_{41})^2 (v'_2)^2 v'_4 (p_2^{(0,1)})^2 p_4^{(2,0)} p_0^{(0,2,0,1,0)} + 2 (u'_{21})^2 u'_{42} u'_{52} (v'_2)^2 v'_4 v'_5 p_4^{(0,1)} p_5^{(0,1)} (p_2^{(1,0)})^2 p_0^{(0,2,0,1,1)} + \\
& 4 u'_{21} u'_{22} u'_{41} u'_{52} (v'_2)^2 v'_4 v'_5 p_2^{(0,1)} p_5^{(0,1)} p_2^{(1,0)} p_4^{(1,0)} p_0^{(0,2,0,1,1)} + 4 u'_{21} u'_{22} u'_{42} u'_{51} (v'_2)^2 v'_4 v'_5 p_2^{(0,1)} p_4^{(0,1)} p_2^{(1,0)} p_5^{(1,0)} p_0^{(0,2,0,1,1)} + \\
& 2 (u'_{22})^2 u'_{41} u'_{51} (v'_2)^2 v'_4 v'_5 (p_2^{(0,1)})^2 p_4^{(1,0)} p_5^{(1,0)} p_0^{(0,2,0,1,1)} + (u'_{21})^2 (u'_{42})^2 (v'_2)^2 (v'_4)^2 (p_4^{(0,1)})^2 (p_2^{(1,0)})^2 p_0^{(0,2,0,2,0)} + \\
& (u'_{22})^2 (u'_{41})^2 (v'_2)^2 (v'_4)^2 (p_2^{(0,1)})^2 (p_4^{(1,0)})^2 p_0^{(0,2,0,2,0)} + 4 u'_{21} u'_{22} u'_{41} u'_{42} (v'_2)^2 (v'_4)^2 p_2^{(0,1)} p_4^{(0,1)} p_2^{(1,0)} p_4^{(1,0)} p_0^{(0,2,0,2,0)} + \\
& (u'_{21})^2 (u'_{32})^2 (v'_2)^2 v''_3 (p_3^{(0,1)})^2 (p_2^{(1,0)})^2 p_0^{(0,2,1,0,0)} + (u'_{21})^2 (v'_2)^2 v'_3 u''_{32} p_3^{(0,1)} (p_2^{(1,0)})^2 p_0^{(0,2,1,0,0)} + \\
& 6 (u'_{21})^2 u'_{22} u'_{32} v'_2 v'_3 v''_2 p_2^{(0,1)} p_3^{(0,1)} (p_2^{(1,0)})^2 p_0^{(0,2,1,0,0)} + (u'_{21})^2 (u'_{32})^2 (v'_2)^2 v'_3 p_3^{(0,2)} (p_2^{(1,0)})^2 p_0^{(0,2,1,0,0)} + \\
& (u'_{22})^2 (u'_{31})^2 (v'_2)^2 v''_3 (p_2^{(0,1)})^2 (p_3^{(1,0)})^2 p_0^{(0,2,1,0,0)} + 2 u'_{22} u'_{32} (v'_2)^2 v'_3 u'_{21} p_2^{(0,1)} p_3^{(0,1)} p_2^{(1,0)} p_0^{(0,2,1,0,0)} + \\
& (u'_{22})^2 (v'_2)^2 v'_3 u'_{31} (p_2^{(0,1)})^2 p_3^{(1,0)} p_0^{(0,2,1,0,0)} + 6 u'_{21} (u'_{22})^2 u'_{31} v'_2 v'_3 v''_2 (p_2^{(0,1)})^2 p_2^{(1,0)} p_3^{(1,0)} p_0^{(0,2,1,0,0)} + \\
& 2 u'_{21} u'_{31} (v'_2)^2 v'_3 u'_{22} p_2^{(0,1)} p_2^{(1,0)} p_3^{(1,0)} p_0^{(0,2,1,0,0)} + 4 u'_{21} u'_{22} u'_{31} u'_{32} (v'_2)^2 v'_3 p_2^{(0,1)} p_3^{(0,1)} p_2^{(1,0)} p_3^{(1,0)} p_0^{(0,2,1,0,0)} + \\
& 2 u'_{21} (u'_{22})^2 u'_{31} (v'_2)^2 v'_3 p_2^{(0,2)} p_2^{(1,0)} p_3^{(1,0)} p_0^{(0,2,1,0,0)} + 4 (u'_{21})^2 u'_{22} u'_{32} (v'_2)^2 v'_3 p_3^{(0,1)} p_2^{(1,0)} p_2^{(1,1)} p_0^{(0,2,1,0,0)} + \\
& 4 u'_{21} (u'_{22})^2 u'_{31} (v'_2)^2 v'_3 p_2^{(0,1)} p_3^{(1,0)} p_2^{(1,1)} p_0^{(0,2,1,0,0)} + 4 u'_{21} u'_{22} u'_{31} u'_{32} (v'_2)^2 v'_3 p_2^{(0,1)} p_2^{(1,0)} p_3^{(1,1)} p_0^{(0,2,1,0,0)} + \\
& 2 (u'_{21})^2 u'_{22} u'_{32} (v'_2)^2 v'_3 p_2^{(0,1)} p_3^{(0,1)} p_2^{(2,0)} p_0^{(0,2,1,0,0)} + (u'_{22})^2 (u'_{31})^2 (v'_2)^2 v'_3 (p_2^{(0,1)})^2 p_3^{(2,0)} p_0^{(0,2,1,0,0)} + \\
& 2 (u'_{21})^2 u'_{32} u'_{52} (v'_2)^2 v'_3 v'_5 p_3^{(0,1)} p_5^{(0,1)} (p_2^{(1,0)})^2 p_0^{(0,2,1,0,1)} + 4 u'_{21} u'_{22} u'_{31} u'_{52} (v'_2)^2 v'_3 v'_5 p_2^{(0,1)} p_5^{(0,1)} p_2^{(1,0)} p_3^{(1,0)} p_0^{(0,2,1,0,1)} + \\
& 4 u'_{21} u'_{22} u'_{32} u'_{51} (v'_2)^2 v'_3 v'_5 p_2^{(0,1)} p_3^{(0,1)} p_2^{(1,0)} p_5^{(1,0)} p_0^{(0,2,1,0,1)} + 2 (u'_{22})^2 u'_{31} u'_{51} (v'_2)^2 v'_3 v'_5 (p_2^{(0,1)})^2 p_3^{(1,0)} p_5^{(1,0)} p_0^{(0,2,1,0,1)} +
\end{aligned}$$

$$\begin{aligned}
& 2(u'_{21})^2 u'_{32} u'_{42} (v'_2)^2 v'_3 v'_4 p_3^{(0,1)} p_4^{(0,1)} (p_2^{(1,0)})^2 p_0^{(0,2,1,1,0)} + 4 u'_{21} u'_{22} u'_{31} u'_{42} (v'_2)^2 v'_3 v'_4 p_2^{(0,1)} p_4^{(0,1)} p_3^{(1,0)} p_0^{(0,2,1,1,0)} + \\
& 4 u'_{21} u'_{22} u'_{32} u'_{41} (v'_2)^2 v'_3 v'_4 p_2^{(0,1)} p_3^{(0,1)} p_2^{(1,0)} p_4^{(1,0)} p_0^{(0,2,1,1,0)} + 2(u'_{22})^2 u'_{31} u'_{41} (v'_2)^2 v'_3 v'_4 (p_2^{(0,1)})^2 p_3^{(1,0)} p_4^{(1,0)} p_0^{(0,2,1,1,0)} + \\
& (u'_{21})^2 (u'_{32})^2 (v'_2)^2 (v'_3)^2 (p_3^{(0,1)})^2 (p_2^{(1,0)})^2 p_0^{(0,2,2,0,0)} + (u'_{22})^2 (u'_{31})^2 (v'_2)^2 (v'_3)^2 (p_2^{(0,1)})^2 (p_3^{(1,0)})^2 p_0^{(0,2,2,0,0)} + \\
& 4 u'_{21} u'_{22} u'_{31} u'_{32} (v'_2)^2 (v'_3)^2 p_2^{(0,1)} p_3^{(0,1)} p_2^{(1,0)} p_3^{(1,0)} p_0^{(0,2,2,0,0)} + 6(u'_{21})^2 (u'_{22})^2 (v'_2)^2 v'_2'' (p_2^{(0,1)})^2 (p_2^{(1,0)})^2 p_0^{(0,3,0,0,0)} + \\
& (u'_{21})^2 (v'_2)^3 u'_{22} p_2^{(0,1)} (p_2^{(1,0)})^2 p_0^{(0,3,0,0,0)} + (u'_{21})^2 (u'_{22})^2 (v'_2)^3 p_2^{(0,2)} (p_2^{(1,0)})^2 p_0^{(0,3,0,0,0)} + (u'_{22})^2 (v'_2)^3 u'_{21} (p_2^{(0,1)})^2 p_2^{(1,0)} p_0^{(0,3,0,0,0)} + \\
& 4(u'_{21})^2 (u'_{22})^2 (v'_2)^3 p_2^{(0,1)} p_2^{(1,0)} p_2^{(1,1)} p_0^{(0,3,0,0,0)} + (u'_{21})^2 (u'_{22})^2 (v'_2)^3 (p_2^{(0,1)})^2 p_2^{(2,0)} p_0^{(0,3,0,0,0)} + \\
& 2(u'_{21})^2 u'_{22} u'_{52} (v'_2)^3 v'_5 p_2^{(0,1)} p_5^{(0,1)} (p_2^{(1,0)})^2 p_0^{(0,3,0,0,1)} + 2 u'_{21} (u'_{22})^2 u'_{51} (v'_2)^3 v'_5 (p_2^{(0,1)})^2 p_2^{(1,0)} p_5^{(1,0)} p_0^{(0,3,0,0,1)} + \\
& 2(u'_{21})^2 u'_{22} u'_{42} (v'_2)^3 v'_4 p_2^{(0,1)} p_4^{(0,1)} (p_2^{(1,0)})^2 p_0^{(0,3,0,1,0)} + 2 u'_{21} (u'_{22})^2 u'_{41} (v'_2)^3 v'_4 (p_2^{(0,1)})^2 p_2^{(1,0)} p_4^{(1,0)} p_0^{(0,3,0,1,0)} + \\
& 2(u'_{21})^2 u'_{22} u'_{32} (v'_2)^3 v'_3 p_2^{(0,1)} p_3^{(0,1)} (p_2^{(1,0)})^2 p_0^{(0,3,1,0,0)} + 2 u'_{21} (u'_{22})^2 u'_{31} (v'_2)^3 v'_3 (p_2^{(0,1)})^2 p_2^{(1,0)} p_3^{(1,0)} p_0^{(0,3,1,0,0)} + \\
& (u'_{21})^2 (u'_{22})^2 (v'_2)^4 (p_2^{(0,1)})^2 (p_2^{(1,0)})^2 p_0^{(0,4,0,0,0)} + (u'_{11})^2 (u'_{12})^2 v_1^{(4)} (p_1^{(0,1)})^2 (p_1^{(1,0)})^2 p_0^{(1,0,0,0,0)} + (u'_{11})^2 u'_{12} v_1^{(3)} p_1^{(0,1)} (p_1^{(1,0)})^2 p_0^{(1,0,0,0,0)} + \\
& (u'_{11})^2 (u'_{12})^2 v_1^{(3)} p_1^{(0,2)} (p_1^{(1,0)})^2 p_0^{(1,0,0,0,0)} + 2(u'_{11})^2 (u'_{12})^2 v_1'' (p_1^{(1,1)})^2 p_0^{(1,0,0,0,0)} + (u'_{12})^2 u'_{11} v_1^{(3)} (p_1^{(0,1)})^2 p_1^{(1,0)} p_0^{(1,0,0,0,0)} + \\
& u'_{11} u'_{12} v_1'' p_1^{(0,1)} p_1^{(1,0)} p_0^{(1,0,0,0,0)} + (u'_{12})^2 u'_{11} v_1'' p_1^{(0,2)} p_1^{(1,0)} p_0^{(1,0,0,0,0)} + 2(u'_{12})^2 u'_{11} v_1'' p_1^{(0,1)} p_1^{(1,1)} p_0^{(1,0,0,0,0)} + \\
& 2(u'_{11})^2 u'_{12} v_1'' p_1^{(1,0)} p_1^{(1,1)} p_0^{(1,0,0,0,0)} + 4(u'_{11})^2 (u'_{12})^2 v_1^{(3)} p_1^{(0,1)} p_1^{(1,0)} p_1^{(1,1)} p_0^{(1,0,0,0,0)} + 2(u'_{11})^2 (u'_{12})^2 v_1'' p_1^{(1,0)} p_1^{(1,2)} p_0^{(1,0,0,0,0)} + \\
& (u'_{11})^2 (u'_{12})^2 v_1^{(3)} (p_1^{(0,1)})^2 p_1^{(2,0)} p_0^{(1,0,0,0,0)} + (u'_{11})^2 u'_{12} v_1'' p_1^{(0,1)} p_1^{(2,0)} p_0^{(1,0,0,0,0)} + (u'_{11})^2 (u'_{12})^2 v_1'' p_1^{(0,2)} p_1^{(2,0)} p_0^{(1,0,0,0,0)} + \\
& 2(u'_{11})^2 (u'_{12})^2 v_1'' p_1^{(0,1)} p_1^{(2,1)} p_0^{(1,0,0,0,0)} + (u'_{11})^2 (u'_{52})^2 v_1'' v_5'' (p_5^{(0,1)})^2 (p_1^{(1,0)})^2 p_0^{(1,0,0,0,1)} + (u'_{11})^2 v_5 u'_{52} v_1'' p_5^{(0,1)} (p_1^{(1,0)})^2 p_0^{(1,0,0,0,1)} + \\
& 2(u'_{11})^2 u'_{12} u'_{52} v_5 v_1^{(3)} p_1^{(0,1)} p_5^{(0,1)} (p_1^{(1,0)})^2 p_0^{(1,0,0,0,1)} + (u'_{11})^2 (u'_{52})^2 v_5 v_1'' p_5^{(0,2)} (p_1^{(1,0)})^2 p_0^{(1,0,0,0,1)} + \\
& (u'_{12})^2 (u'_{51})^2 v_1'' v_5'' (p_1^{(0,1)})^2 (p_5^{(1,0)})^2 p_0^{(1,0,0,0,1)} + 2 u'_{12} u'_{52} v_5 u'_{11} v_1'' p_1^{(0,1)} p_5^{(0,1)} p_1^{(1,0)} p_0^{(1,0,0,0,1)} + (u'_{12})^2 v_5 u'_{51} v_1'' (p_1^{(0,1)})^2 p_5^{(1,0)} p_0^{(1,0,0,0,1)} + \\
& 2 u'_{11} (u'_{12})^2 u'_{51} v_5 v_1^{(3)} (p_1^{(0,1)})^2 p_1^{(1,0)} p_5^{(1,0)} p_0^{(1,0,0,0,1)} + 2 u'_{11} u'_{51} v_5 u'_{12} v_1'' p_1^{(0,1)} p_1^{(1,0)} p_5^{(1,0)} p_0^{(1,0,0,0,1)} + \\
& 4 u'_{11} u'_{12} u'_{51} u'_{52} v_1'' v_5'' p_1^{(0,1)} p_5^{(0,1)} p_1^{(1,0)} p_5^{(1,0)} p_0^{(1,0,0,0,1)} + 2 u'_{11} (u'_{12})^2 u'_{51} v_5 v_1'' p_1^{(0,2)} p_1^{(1,0)} p_5^{(1,0)} p_0^{(1,0,0,0,1)} + \\
& 4(u'_{11})^2 u'_{12} u'_{52} v_5 v_1'' p_5^{(0,1)} p_1^{(1,0)} p_1^{(1,1)} p_0^{(1,0,0,0,1)} + 4 u'_{11} (u'_{12})^2 u'_{51} v_5 v_1'' p_1^{(0,1)} p_5^{(1,0)} p_1^{(1,1)} p_0^{(1,0,0,0,1)} + \\
& 4 u'_{11} u'_{12} u'_{51} u'_{52} v_5 v_1'' p_1^{(0,1)} p_1^{(1,0)} p_5^{(1,1)} p_0^{(1,0,0,0,1)} + 2(u'_{11})^2 u'_{12} u'_{52} v_5 v_1'' p_1^{(0,1)} p_5^{(0,1)} p_1^{(2,0)} p_0^{(1,0,0,0,1)} + \\
& (u'_{12})^2 (u'_{51})^2 v_5 v_1'' (p_1^{(0,1)})^2 p_5^{(2,0)} p_0^{(1,0,0,0,1)} + (u'_{11})^2 (u'_{52})^2 (v'_5)^2 v_1'' (p_5^{(0,1)})^2 (p_1^{(1,0)})^2 p_0^{(1,0,0,0,2)} + \\
& (u'_{12})^2 (u'_{51})^2 (v'_5)^2 v_1'' (p_1^{(0,1)})^2 (p_5^{(1,0)})^2 p_0^{(1,0,0,0,2)} + 4 u'_{11} u'_{12} u'_{51} u'_{52} (v'_5)^2 v_1'' p_1^{(0,1)} p_5^{(0,1)} p_1^{(1,0)} p_5^{(1,0)} p_0^{(1,0,0,0,2)} + \\
& (u'_{11})^2 (u'_{42})^2 v_1'' v_4'' (p_4^{(0,1)})^2 (p_1^{(1,0)})^2 p_0^{(1,0,0,1,0)} + (u'_{11})^2 v_4 u'_{42} v_1'' p_4^{(0,1)} (p_1^{(1,0)})^2 p_0^{(1,0,0,1,0)} + \\
& 2(u'_{11})^2 u'_{12} u'_{42} v_4 v_1^{(3)} p_1^{(0,1)} p_4^{(0,1)} (p_1^{(1,0)})^2 p_0^{(1,0,0,1,0)} + (u'_{11})^2 (u'_{42})^2 v_4 v_1'' p_4^{(0,2)} (p_1^{(1,0)})^2 p_0^{(1,0,0,1,0)} + \\
& (u'_{12})^2 (u'_{41})^2 v_1'' v_4'' (p_1^{(0,1)})^2 (p_4^{(1,0)})^2 p_0^{(1,0,0,1,0)} + 2 u'_{12} u'_{42} v_4 u'_{11} v_1'' p_1^{(0,1)} p_4^{(0,1)} p_1^{(1,0)} p_0^{(1,0,0,1,0)} + (u'_{12})^2 v_4 u'_{41} v_1'' (p_1^{(0,1)})^2 p_4^{(1,0)} p_0^{(1,0,0,1,0)} + \\
& 2 u'_{11} (u'_{12})^2 u'_{41} v_4 v_1^{(3)} (p_1^{(0,1)})^2 p_1^{(1,0)} p_4^{(1,0)} p_0^{(1,0,0,1,0)} + 2 u'_{11} u'_{41} v_4 u'_{12} v_1'' p_1^{(0,1)} p_1^{(1,0)} p_4^{(1,0)} p_0^{(1,0,0,1,0)} + \\
& 4 u'_{11} u'_{12} u'_{41} u'_{42} v_1'' v_4'' p_1^{(0,1)} p_4^{(0,1)} p_1^{(1,0)} p_4^{(1,0)} p_0^{(1,0,0,1,0)} + 2 u'_{11} (u'_{12})^2 u'_{41} v_4 v_1'' p_1^{(0,2)} p_1^{(1,0)} p_4^{(1,0)} p_0^{(1,0,0,1,0)} + \\
& 4(u'_{11})^2 u'_{12} u'_{42} v_4 v_1'' p_4^{(0,1)} p_1^{(1,1)} p_0^{(1,0,0,1,0)} + 4 u'_{11} (u'_{12})^2 u'_{41} v_4 v_1'' p_1^{(0,1)} p_4^{(1,0)} p_1^{(1,1)} p_0^{(1,0,0,1,0)} + \\
& 4 u'_{11} u'_{12} u'_{41} u'_{42} v_4 v_1'' p_1^{(0,1)} p_1^{(1,0)} p_4^{(1,1)} p_0^{(1,0,0,1,0)} + 2(u'_{11})^2 u'_{12} u'_{42} v_4 v_1'' p_1^{(0,1)} p_4^{(0,1)} p_1^{(2,0)} p_0^{(1,0,0,1,0)} + \\
& (u'_{12})^2 (u'_{41})^2 v_4 v_1'' (p_1^{(0,1)})^2 p_4^{(2,0)} p_0^{(1,0,0,1,0)} + 2(u'_{11})^2 u'_{42} u'_{52} v_4 v_5 v_1'' p_4^{(0,1)} p_5^{(0,1)} (p_1^{(1,0)})^2 p_0^{(1,0,0,1,1)} + \\
& 4 u'_{11} u'_{12} u'_{41} u'_{52} v_4 v_5 v_1'' p_1^{(0,1)} p_5^{(0,1)} p_1^{(1,0)} p_4^{(1,0)} p_1^{(1,0)} p_5^{(1,0)} p_0^{(1,0,0,1,1)} + \\
& 2(u'_{12})^2 u'_{41} u'_{51} v_4 v_5 v_1'' (p_1^{(0,1)})^2 p_4^{(1,0)} p_5^{(1,0)} p_0^{(1,0,0,1,1)} + (u'_{11})^2 (u'_{42})^2 (v'_4)^2 v_1'' (p_4^{(0,1)})^2 (p_1^{(1,0)})^2 p_0^{(1,0,0,2,0)} + \\
& (u'_{12})^2 (u'_{41})^2 (v'_4)^2 v_1'' (p_1^{(0,1)})^2 (p_4^{(1,0)})^2 p_0^{(1,0,0,2,0)} + 4 u'_{11} u'_{12} u'_{41} u'_{42} (v'_4)^2 v_1'' p_1^{(0,1)} p_4^{(0,1)} p_1^{(1,0)} p_4^{(1,0)} p_0^{(1,0,0,2,0)} + \\
& (u'_{11})^2 (u'_{32})^2 v_1'' v_3'' (p_3^{(0,1)})^2 (p_1^{(1,0)})^2 p_0^{(1,0,1,0,0)} + (u'_{11})^2 v_3 u'_{32} v_1'' p_3^{(0,1)} (p_1^{(1,0)})^2 p_0^{(1,0,1,0,0)} + \\
& 2(u'_{11})^2 u'_{12} u'_{32} v_3 v_1^{(3)} p_1^{(0,1)} p_3^{(0,1)} (p_1^{(1,0)})^2 p_0^{(1,0,1,0,0)} + (u'_{11})^2 (u'_{32})^2 v_3 v_1'' p_3^{(0,2)} (p_1^{(1,0)})^2 p_0^{(1,0,1,0,0)} + \\
& (u'_{12})^2 (u'_{31})^2 v_1'' v_3'' (p_1^{(0,1)})^2 (p_3^{(1,0)})^2 p_0^{(1,0,1,0,0)} + 2 u'_{12} u'_{32} v_3 u'_{11} v_1'' p_1^{(0,1)} p_3^{(0,1)} p_1^{(1,0)} p_0^{(1,0,1,0,0)} + (u'_{12})^2 v_3 u'_{31} v_1'' (p_1^{(0,1)})^2 p_3^{(1,0)} p_0^{(1,0,1,0,0)} + \\
& 2 u'_{11} (u'_{12})^2 u'_{31} v_3 v_1^{(3)} (p_1^{(0,1)})^2 p_1^{(1,0)} p_3^{(1,0)} p_0^{(1,0,1,0,0)} + 2 u'_{11} u'_{31} v_3 u'_{12} v_1'' p_1^{(0,1)} p_1^{(1,0)} p_3^{(1,0)} p_0^{(1,0,1,0,0)} + \\
& 4 u'_{11} u'_{12} u'_{31} u'_{32} v_1'' v_3'' p_1^{(0,1)} p_3^{(0,1)} p_1^{(1,0)} p_3^{(1,0)} p_0^{(1,0,1,0,0)} + 2 u'_{11} (u'_{12})^2 u'_{31} v_3 v_1'' p_1^{(0,2)} p_1^{(1,0)} p_3^{(1,0)} p_0^{(1,0,1,0,0)} + \\
& 4(u'_{11})^2 u'_{12} u'_{32} v_3 v_1'' p_3^{(0,1)} p_1^{(1,0)} p_1^{(1,1)} p_0^{(1,0,1,0,0)} + 4 u'_{11} (u'_{12})^2 u'_{31} v_3 v_1'' p_1^{(0,1)} p_3^{(1,0)} p_1^{(1,1)} p_0^{(1,0,1,0,0)} + \\
& 4 u'_{11} u'_{12} u'_{31} u'_{32} v_3 v_1'' p_1^{(0,1)} p_1^{(1,0)} p_3^{(1,1)} p_0^{(1,0,1,0,0)} + 2(u'_{11})^2 u'_{12} u'_{32} v_3 v_1'' p_1^{(0,1)} p_3^{(0,1)} p_1^{(2,0)} p_0^{(1,0,1,0,0)} + \\
& (u'_{12})^2 (u'_{31})^2 v_3 v_1'' (p_1^{(0,1)})^2 p_3^{(2,0)} p_0^{(1,0,1,0,0)} + 2(u'_{11})^2 u'_{32} u'_{52} v_3 v_5 v_1'' p_3^{(0,1)} p_5^{(0,1)} (p_1^{(1,0)})^2 p_0^{(1,0,1,0,1)} + \\
& 4 u'_{11} u'_{12} u'_{31} u'_{52} v_3 v_5 v_1'' p_1^{(0,1)} p_5^{(0,1)} p_1^{(1,0)} p_3^{(1,0)} p_1^{(1,0)} p_5^{(1,0)} p_0^{(1,0,1,0,1)} + \\
& 2(u'_{12})^2 u'_{31} u'_{51} v_3 v_5 v_1'' (p_1^{(0,1)})^2 p_3^{(1,0)} p_5^{(1,0)} p_0^{(1,0,1,0,1)} + 2(u'_{11})^2 u'_{32} u'_{42} v_3 v_4 v_1'' p_3^{(0,1)} p_4^{(0,1)} (p_1^{(1,0)})^2 p_0^{(1,0,1,1,0)} +
\end{aligned}$$

$$\begin{aligned}
& 4 u'_{11} u'_{12} u'_{31} u'_{42} v'_3 v'_4 v''_1 p_1^{(0,1)} p_4^{(0,1)} p_1^{(1,0)} p_3^{(1,0)} p_0^{(1,0,1,1,0)} + 4 u'_{11} u'_{12} u'_{32} u'_{41} v'_3 v'_4 v''_1 p_1^{(0,1)} p_3^{(0,1)} p_1^{(1,0)} p_4^{(1,0)} p_0^{(1,0,1,1,0)} + \\
& 2 (u'_{12})^2 u'_{31} u'_{41} v'_3 v'_4 v''_1 (p_1^{(0,1)})^2 p_3^{(1,0)} p_4^{(1,0)} p_0^{(1,0,1,1,0)} + (u'_{11})^2 (u'_{32})^2 (v'_3)^2 v''_1 (p_3^{(0,1)})^2 (p_1^{(1,0)})^2 p_0^{(1,0,2,0,0)} + \\
& (u'_{12})^2 (u'_{31})^2 (v'_3)^2 v''_1 (p_1^{(0,1)})^2 (p_3^{(1,0)})^2 p_0^{(1,0,2,0,0)} + 4 u'_{11} u'_{12} u'_{31} u'_{32} (v'_3)^2 v''_1 p_1^{(0,1)} p_3^{(0,1)} p_1^{(1,0)} p_3^{(1,0)} p_0^{(1,0,2,0,0)} + \\
& (u'_{11})^2 (u'_{22})^2 v''_1 v''_2 (p_2^{(0,1)})^2 (p_1^{(0,0)})^2 p_0^{(1,1,0,0,0)} + (u'_{11})^2 v'_2 u'_{22} v''_1 p_2^{(0,1)} (p_1^{(0,0)})^2 p_0^{(1,1,0,0,0)} + \\
& 2 (u'_{11})^2 u'_{12} u'_{22} v'_2 v''_1 p_1^{(0,1)} p_2^{(0,1)} (p_1^{(1,0)})^2 p_0^{(1,1,0,0,0)} + (u'_{11})^2 (u'_{22})^2 v'_2 v''_1 p_2^{(0,2)} (p_1^{(1,0)})^2 p_0^{(1,1,0,0,0)} + \\
& (u'_{12})^2 (u'_{21})^2 v''_1 v''_2 (p_1^{(0,1)})^2 (p_2^{(1,0)})^2 p_0^{(1,1,0,0,0)} + 2 u'_{12} u'_{22} v'_2 u'_{11} v''_1 p_1^{(0,1)} p_2^{(0,1)} p_1^{(1,0)} p_0^{(1,1,0,0,0)} + \\
& (u'_{12})^2 v'_2 u'_{21} v''_1 (p_1^{(0,1)})^2 p_2^{(1,0)} p_0^{(1,1,0,0,0)} + 2 u'_{11} (u'_{12})^2 u'_{21} v'_2 v''_1 (p_1^{(0,1)})^2 p_1^{(1,0)} p_2^{(1,0)} p_0^{(1,1,0,0,0)} + \\
& 2 u'_{11} u'_{21} v'_2 u'_{12} v''_1 p_1^{(0,1)} p_1^{(1,0)} p_2^{(1,0)} p_0^{(1,1,0,0,0)} + 4 u'_{11} u'_{12} u'_{21} u'_{22} v''_1 v''_2 p_1^{(0,1)} p_2^{(0,1)} p_1^{(1,0)} p_2^{(1,0)} p_0^{(1,1,0,0,0)} + \\
& 2 u'_{11} (u'_{12})^2 u'_{21} v'_2 v''_1 p_1^{(0,2)} p_1^{(1,0)} p_2^{(1,0)} p_0^{(1,1,0,0,0)} + 4 (u'_{11})^2 u'_{12} u'_{22} v'_2 v''_1 p_2^{(0,1)} p_1^{(1,0)} p_1^{(1,1)} p_0^{(1,1,0,0,0)} + \\
& 4 u'_{11} (u'_{12})^2 u'_{21} v'_2 v''_1 p_1^{(0,1)} p_2^{(1,0)} p_1^{(1,1)} p_0^{(1,1,0,0,0)} + 4 u'_{11} u'_{12} u'_{21} u'_{22} v'_2 v''_1 p_1^{(0,1)} p_1^{(1,0)} p_2^{(1,1)} p_0^{(1,1,0,0,0)} + \\
& 2 (u'_{11})^2 u'_{12} u'_{22} v'_2 v''_1 p_1^{(0,1)} p_2^{(0,1)} p_1^{(2,0)} p_0^{(1,1,0,0,0)} + (u'_{12})^2 (u'_{21})^2 v'_2 v''_1 (p_1^{(0,1)})^2 p_2^{(2,0)} p_0^{(1,1,0,0,0)} + \\
& 2 (u'_{11})^2 u'_{22} u'_{52} v'_2 v''_1 p_2^{(0,1)} p_5^{(0,1)} (p_1^{(1,0)})^2 p_0^{(1,1,0,0,1)} + 4 u'_{11} u'_{12} u'_{21} u'_{52} v'_2 v''_1 p_1^{(0,1)} p_5^{(0,1)} p_1^{(1,0)} p_2^{(1,0)} p_0^{(1,1,0,0,1)} + \\
& 4 u'_{11} u'_{12} u'_{22} u'_{51} v'_2 v''_1 p_1^{(0,1)} p_2^{(0,1)} p_1^{(1,0)} p_5^{(1,0)} p_0^{(1,1,0,0,1)} + 2 (u'_{12})^2 u'_{21} u'_{51} v'_2 v''_1 (p_1^{(0,1)})^2 p_2^{(1,0)} p_5^{(1,0)} p_0^{(1,1,0,0,1)} + \\
& 2 (u'_{11})^2 u'_{22} u'_{42} v'_2 v''_1 p_2^{(0,1)} p_4^{(0,1)} (p_1^{(1,0)})^2 p_0^{(1,1,0,1,0)} + 4 u'_{11} u'_{12} u'_{21} u'_{42} v'_2 v''_1 p_1^{(0,1)} p_4^{(0,1)} p_1^{(1,0)} p_2^{(1,0)} p_0^{(1,1,0,1,0)} + \\
& 4 u'_{11} u'_{12} u'_{22} u'_{41} v'_2 v''_1 p_1^{(0,1)} p_2^{(0,1)} p_1^{(1,0)} p_4^{(1,0)} p_0^{(1,1,0,1,0)} + 2 (u'_{12})^2 u'_{21} u'_{41} v'_2 v''_1 (p_1^{(0,1)})^2 p_2^{(1,0)} p_4^{(1,0)} p_0^{(1,1,0,1,0)} + \\
& 2 (u'_{11})^2 u'_{22} u'_{32} v'_2 v''_1 p_2^{(0,1)} p_3^{(0,1)} (p_1^{(1,0)})^2 p_0^{(1,1,1,0,0)} + 4 u'_{11} u'_{12} u'_{21} u'_{32} v'_2 v''_1 p_1^{(0,1)} p_3^{(0,1)} p_1^{(1,0)} p_2^{(1,0)} p_0^{(1,1,1,0,0)} + \\
& 4 u'_{11} u'_{12} u'_{22} u'_{31} v'_2 v''_1 p_1^{(0,1)} p_2^{(0,1)} p_1^{(1,0)} p_3^{(1,0)} p_0^{(1,1,1,0,0)} + 2 (u'_{12})^2 u'_{21} u'_{31} v'_2 v''_1 (p_1^{(0,1)})^2 p_2^{(1,0)} p_3^{(1,0)} p_0^{(1,1,1,0,0)} + \\
& (u'_{11})^2 (u'_{22})^2 (v'_2)^2 v''_1 (p_2^{(0,1)})^2 (p_1^{(1,0)})^2 p_0^{(1,2,0,0,0)} + (u'_{12})^2 (u'_{21})^2 (v'_2)^2 v''_1 (p_1^{(0,1)})^2 (p_2^{(1,0)})^2 p_0^{(1,2,0,0,0)} + \\
& 4 u'_{11} u'_{12} u'_{21} u'_{22} (v'_2)^2 v''_1 p_1^{(0,1)} p_2^{(0,1)} p_1^{(1,0)} p_2^{(1,0)} p_0^{(1,2,0,0,0)} + 3 (u'_{11})^2 (u'_{12})^2 (v''_1)^2 (p_1^{(0,1)})^2 (p_1^{(1,0)})^2 p_0^{(2,0,0,0,0)}
\end{aligned}$$

A3.7. Fünfte Ableitung

```

d5h[x1_, x2_] = D[h[x1, x2], x1, x1, x1, x2, x2];
d5h00 = StringReplace[ToString[Expand[d5h[0, 0]], FormatType -> InputForm],
  {"[0, 0, 0, 0, 0]" -> "", "[0, 0]" -> "", "[0]" -> ""}];
Print[1 + Count[Characters[d5h00], "+"], " Terme"];

```

8065 Terme

A3.8. Sechste Ableitung

```

d6h[x1_, x2_] = D[h[x1, x2], x1, x1, x1, x2, x2, x2];
d6h00 = StringReplace[ToString[Expand[d6h[0, 0]], FormatType -> InputForm],
  {"[0, 0, 0, 0, 0]" -> "", "[0, 0]" -> "", "[0]" -> ""}];
Print[1 + Count[Characters[d6h00], "+"], " Terme"];

```

44840 Terme