（19）国家知识产权局

（12）发明专利

（54）发明名称
　　一种网格化CMY颜色空间的网格点阵列模型
构建方法及应用

（57）摘要
　　本发明涉及一种网格化CMY颜色空间的网格
点阵列模型构建方法及应用,通过对C、M、Y轴的
网格化划分,实现对CMY颜色空间内一维直线、二
维平面、三维立体的网格划分,以此构建CMY颜色
空间的网格化阵列模型,并通过对CMY颜色空间
内各点、线、面、体的网格点阵列矩阵与阵列颜色
矩阵的构建实现对应色谱的数字化表达。在实际
应用中,上述模型及算法可自行设定网格化精
度,调用各组模型算法实现网格化色谱的可视
化,有效提高了颜色的分析与选择效率。

1. 一种网格化CMY颜色空间的网格点阵列模型构建方法,其特征在于:基于CMY颜色空间的正六面体进行网格划分,对其网格点阵列模型的构建,包括如下步骤:

步骤A. 以正六面体上其中一顶点对应白色颜色值0,该顶点所连三根棱上的另一端分别对应CMY颜色空间中的青色颜色值c、品红色颜色值m、黄色颜色值y,构建CMY颜色空间所对应的立方体空间,然后进入步骤B;

步骤B. 针对白色所对应顶点与青色所对应顶点之间的棱,执行t等分,即获得包含该棱两端顶点在内的t+1个点,对其中各网格点依次编号为1、2、…、t+1;

针对白色所对应顶点与品红色所对应顶点之间的棱,执行n等分,即获得包含该棱两端顶点在内的n+1个点,对其中各网格点依次编号为1、2、…、n+1;

针对白色所对应顶点与黄色所对应顶点之间的棱,执行p等分,即获得包含该棱两端顶点在内的p+1个点,对其中各网格点依次编号为1、2、…、p+1;然后进入步骤C;

步骤C. 根据三维坐标原理,基于由白点出发的三根棱上的划分,则构成(t+1)(n+1)(p+1)个网格点,则设以网格点编号定义的网格点坐标为ω(i,j,k)如下,然后进入步骤D;

$$\omega(i,j,k)=[(i-1)/t,(j-1)/n,(k-1)/p];$$

$$i=1,2,...,t+1;j=1,2,...,n+1;k=1,2,...,p+1;$$

步骤D. 获得CMY颜色空间的网格点阵列矩阵表达如下,然后进入步骤E;

$$\left[\omega(i,j,k)\right]_{(t+1)\times(n+1)\times(p+1)}=\begin{bmatrix} \omega(t+1,1,k) & \omega(t+1,2,k) & \cdots & \omega(t+1,j,k) & \cdots & \omega(t+1,n+1,k) \\ \vdots & \vdots & \cdots & \vdots & \cdots & \vdots \\ \omega(i,1,k) & \omega(i,2,k) & \cdots & \omega(i,j,k) & \cdots & \omega(i,n+1,k) \\ \vdots & \vdots & \cdots & \vdots & \cdots & \vdots \\ \omega(2,1,k) & \omega(2,2,k) & \cdots & \omega(2,j,k) & \cdots & \omega(2,n+1,k) \\ \omega(1,1,k) & \omega(1,2,k) & \cdots & \omega(1,j,k) & \cdots & \omega(1,n+1,k) \end{bmatrix}_{(t+1)\times(n+1)\times(p+1)};$$

步骤E. 将CMY颜色空间内各网格点坐标值作变换,获得各网格点颜色值$\varphi(i,j,k)$如下,然后进入步骤F;

$$\varphi(i,j,k)=\left[\frac{i-1}{t}\times c,\frac{j-1}{n}\times m,\frac{k-1}{p}\times y\right];$$

步骤F. 将CMY颜色空间各网格颜色值$\varphi(i,j,k)$带入网格点阵列矩阵中,可得到CMY颜色空间的网格点阵列颜色矩阵如下:

$$\left[\varphi(i,j,k)\right]_{(t+1)\times(n+1)\times(p+1)}=\begin{bmatrix} \left(\frac{i-1}{t}\times c,m,0\right) & \left(\frac{i-1}{t}\times c,m,\frac{y}{p}\right) & \cdots & \left(\frac{i-1}{t}\times c,m,\frac{k-1}{p}\times y\right) & \cdots & \left(\frac{i-1}{t}\times c,m,y\right) \\ \vdots & \vdots & \cdots & \vdots & \cdots & \vdots \\ \left(\frac{i-1}{t}\times c,\frac{j-1}{n}\times m,0\right) & \left(\frac{i-1}{t}\times c,\frac{j-1}{n}\times m,\frac{y}{p}\right) & \cdots & \left(\frac{i-1}{t}\times c,\frac{j-1}{n}\times m,\frac{k-1}{p}\times y\right) & \cdots & \left(\frac{i-1}{t}\times c,\frac{j-1}{n}\times m,y\right) \\ \vdots & \vdots & \cdots & \vdots & \cdots & \vdots \\ \left(\frac{i-1}{t}\times c,\frac{m}{n},0\right) & \left(\frac{i-1}{t}\times c,\frac{m}{n},\frac{y}{p}\right) & \cdots & \left(\frac{i-1}{t}\times c,\frac{m}{n},\frac{k-1}{p}\times y\right) & \cdots & \left(\frac{i-1}{t}\times c,\frac{g}{n}y\right) \\ \left(\frac{i-1}{t}\times c,0,0\right) & \left(\frac{i-1}{t}\times c,0,\frac{y}{p}\right) & \cdots & \left(\frac{i-1}{t}\times c,0,\frac{k-1}{p}\times y\right) & \cdots & \left(\frac{i-1}{t}\times c,0,y\right) \end{bmatrix}_{(t+1)\times(n+1)\times(p+1)} \circ$$

2. 根据权利要求1所述一种网格化CMY颜色空间的网格点阵列模型构建方法,其特征在于:基于步骤A至步骤F,针对该立方体空间中任意两点a和b,结合点a的颜色值(c_1,m_1,y_1)、点b的颜色值(c_2,m_2,y_2),以及对该两点之间连线的L等分,构建该两点之间连线上各点的颜色值模型如下:

$$\overline{ab}(l) = \left(\frac{L+1-l}{L} \times c_1 + \frac{l-1}{L} \times c_2, \frac{L+1-l}{L} \times m_1 + \frac{l-1}{L} \times m_2, \frac{L+1-l}{L} \times y_1 + \frac{l-1}{L} \times y_2 \right)$$

其中,l＝1、…、L+1,l表示该两点连线上由点a至点b方向、包含点a和点b在内各位置中的各点的序号。

3.根据权利要求2所述一种网格化CMY颜色空间的网格点阵列模型构建方法,其特征在于:基于步骤A至步骤F,定义立方体空间中白色所对应顶点为点W、青色所对应顶点为点C、品红色所对应顶点为点M、黄色所对应顶点为点Y,则点W、点C、点M所在面的另一顶点为蓝色所对应点B,点W、点C、点Y所在面的另一顶点为绿色所对应点G,点W、点M、点Y所在面的另一顶点为红色所对应点R,点B、点M、点R所在面的另一顶点为黑色所对应点K;

则从点W出发,棱$\overline{WC}$基于t等分、其上各点的颜色值模型如下:

$$\overline{WC}(i) = \left(\frac{i-1}{t} \times c, 0, 0 \right);$$

从点M出发,棱$\overline{MB}$基于t等分、其上各点的颜色值模型如下:

$$\overline{MB}(i) = \left(\frac{i-1}{t} \times c, m, 0 \right);$$

从点R出发,棱$\overline{RK}$基于t等分、其上各点的颜色值模型如下:

$$\overline{RK}(i) = \left(\frac{i-1}{t} \times c, m, y \right);$$

从点Y出发,棱$\overline{YG}$基于t等分、其上各点的颜色值模型如下:

$$\overline{YG}(i) = \left(\frac{i-1}{t} \times c, 0, y \right);$$

从点W出发,棱$\overline{WM}$基于n等分、其上各点的颜色值模型如下:

$$\overline{WM}(j) = \left(0, \frac{j-1}{n} \times m, 0 \right);$$

从点C出发,棱$\overline{CB}$基于n等分、其上各点的颜色值模型如下:

$$\overline{CB}(j) = \left(c, \frac{j-1}{n} \times m, 0 \right);$$

从点G出发,棱$\overline{GK}$基于n等分、其上各点的颜色值模型如下:

$$\overline{GK}(j) = \left(c, \frac{j-1}{n} \times m, y \right);$$

从点Y出发,棱$\overline{YR}$基于n等分、其上各点的颜色值模型如下:

$$\overline{YR}(j) = \left(0, \frac{j-1}{n} \times m, y \right);$$

从点W出发,棱$\overline{WY}$基于p等分、其上各点的颜色值模型如下:

$$\overline{WY}(k) = \left(0, 0, \frac{k-1}{p} \times y \right);$$

从点C出发，棱$\overline{CG}$基于p等分、其上各点的颜色值模型如下：

$$\overline{CG}(k) = \left(c, 0, \frac{k-1}{p} \times y \right);$$

从点B出发，棱$\overline{BK}$基于p等分、其上各点的颜色值模型如下：

$$\overline{BK}(k) = \left(c, m, \frac{k-1}{p} \times y \right);$$

从点M出发，棱$\overline{MR}$基于p等分、其上各点的颜色值模型如下：

$$\overline{MR}(k) = \left(0, m, \frac{k-1}{p} \times y \right)。$$

4.根据权利要求3所述一种网格化CMY颜色空间的网格点阵列模型构建方法，其特征在于：基于步骤A至步骤F，则$\overline{WCBM}$面中对角线$\overline{CM}$基于L等分、其上各点的颜色值模型如下：

$$\overline{CM}(l) = \left(\frac{L+1-l}{L} \times c, \frac{l-1}{L} \times m, 0 \right);$$

对角线$\overline{WB}$基于L等分、其上各点的颜色值模型如下：

$$\overline{WB}(l) = \left(\frac{l-1}{L} \times c, \frac{l-1}{L} \times m, 0 \right);$$

则$\overline{GKRY}$面中对角线$\overline{GR}$基于L等分、其上各点的颜色值模型如下：

$$\overline{GR}(l) = \left(\frac{L+1-l}{L} \times c, \frac{l-1}{L} \times m, y \right);$$

对角线$\overline{YK}$基于L等分、其上各点的颜色值模型如下：

$$\overline{YK}(l) = \left(\frac{l-1}{L} \times c, \frac{l-1}{L} \times m, y \right);$$

则$\overline{WCGY}$面中对角线$\overline{CY}$基于L等分、其上各点的颜色值模型如下：

$$\overline{CY}(l) = \left(\frac{L+1-l}{L} \times c, 0, \frac{l-1}{L} \times y \right);$$

对角线$\overline{WG}$基于L等分、其上各点的颜色值模型如下：

$$\overline{WG}(l) = \left(\frac{l-1}{L} \times c, 0, \frac{l-1}{L} \times y \right);$$

则$\overline{MBKR}$面中对角线$\overline{BR}$基于L等分、其上各点的颜色值模型如下：

$$\overline{BR}(l) = \left(\frac{L+1-l}{L} \times c, m, \frac{l-1}{L} \times y \right);$$

对角线 $\overline{MK}$ 基于L等分、其上各点的颜色值模型如下：

$$\overline{MK}(l)=\left(\frac{l-1}{L}\times c,m,\frac{l-1}{L}\times y\right);$$

则 $\overline{WMRY}$ 面中对角线 $\overline{MY}$ 基于L等分、其上各点的颜色值模型如下：

$$\overline{MY}(l)=\left(0,\frac{L+1-l}{L}\times m,\frac{l-1}{L}\times y\right);$$

对角线 $\overline{WR}$ 基于L等分、其上各点的颜色值模型如下：

$$\overline{WR}(l)=\left(0,\frac{l-1}{L}\times m,\frac{l-1}{L}\times y\right);$$

则 $\overline{CBKG}$ 面中对角线 $\overline{BG}$ 基于L等分、其上各点的颜色值模型如下：

$$\overline{BG}(l)=\left(c,\frac{L+1-l}{L}\times m,\frac{l-1}{L}\times y\right);$$

对角线 $\overline{CK}$ 基于L等分、其上各点的颜色值模型如下：

$$\overline{CK}(l)=\left(c,\frac{l-1}{L}\times m,\frac{l-1}{L}\times y\right)。$$

5.根据权利要求4所述一种网格化CMY颜色空间的网格点阵列模型构建方法,其特征在于:基于步骤A至步骤F,则体对角线 $\overline{WK}$ 基于L等分、其上各点的颜色值模型如下：

$$\overline{WK}(l)=\left(\frac{l-1}{L}\times c,\frac{l-1}{L}\times m,\frac{l-1}{L}\times y\right);$$

体对角线 $\overline{YB}$ 基于L等分、其上各点的颜色值模型如下：

$$\overline{YB}(l)=\left(\frac{l-1}{L}\times c,\frac{l-1}{L}\times m,\frac{L+1-l}{L}\times y\right);$$

体对角线 $\overline{GM}$ 基于L等分、其上各点的颜色值模型如下：

$$\overline{GM}(l)=\left(\frac{L+1-l}{L}\times c,\frac{l-1}{L}\times m,\frac{L+1-l}{L}\times y\right);$$

体对角线 $\overline{CR}$ 基于L等分、其上各点的颜色值模型如下：

$$\overline{CR}(l)=\left(\frac{L+1-l}{L}\times c,\frac{l-1}{L}\times m,\frac{l-1}{L}\times y\right)。$$

6.根据权利要求1所述一种网格化CMY颜色空间的网格点阵列模型构建方法,其特征在于:基于步骤A至步骤F,定义立方体空间中白色所对应顶点为点W、青色所对应顶点为点C、品红色所对应顶点为点M、黄色所对应顶点为点Y,则点W、点C、点M所在面的另一顶点为蓝色所对应点B,点W、点C、点Y所在面的另一顶点为绿色所对应点G,点W、点M、点Y所在面的另一顶点为红色所对应点R,点B、点M、点R所在面的另一顶点为黑色所对应点K;根据 $\overline{WC}$ 的t等分、$\overline{WM}$ 的n等分、$\overline{WY}$ 的p等分,则基于i＝1、…、t+1,与 $\overline{WC}$ 相垂直t+1个剖面颜色值模型矩

阵分别如下：

$$\left[\frac{i-1}{t}\times c, \frac{j-1}{n}\times m, \frac{k-1}{p}\times y\right]_{(n+1)\times(p+1)}$$

基于j=1、…、n+1，与$\overline{WM}$相垂直n+1个剖面颜色值模型矩阵分别如下：

$$\left[\frac{i-1}{t}\times c, \frac{j-1}{n}\times m, \frac{k-1}{p}\times y\right]_{(t+1)\times(p+1)}$$

基于k=1、…、p+1，与$\overline{WY}$相垂直p+1剖面颜色值模型矩阵分别如下：

$$\left[\frac{i-1}{t}\times c, \frac{j-1}{n}\times m, \frac{k-1}{p}\times y\right]_{(n+1)\times(t+1)}。$$

7.根据权利要求6所述一种网格化CMY颜色空间的网格点阵列模型构建方法，其特征在于：基于步骤A至步骤F，根据$\overline{WC}$的t等分、$\overline{WM}$的n等分、$\overline{WY}$的p等分，则$\overline{WCBM}$面上颜色值模型如下：

$$\overline{WCBM}(i,j)=\left[\frac{i-1}{t}\times c, \frac{j-1}{n}\times m, 0\right]_{(t+1)\times(n+1)};$$

$\overline{GKRY}$面上颜色值模型如下：

$$\overline{GKRY}(i,j)=\left[\frac{i-1}{t}\times c, \frac{j-1}{n}\times m, y\right]_{(t+1)\times(n+1)};$$

$\overline{WCGY}$面上各点的颜色值模型如下：

$$\overline{WCGY}(i,k)=\left[\frac{i-1}{t}\times c, 0, \frac{k-1}{p}\times y\right]_{(t+1)\times(p+1)};$$

$\overline{MBKR}$面上各点的颜色值模型如下：

$$\overline{MBKR}(i,k)=\left[\frac{i-1}{t}\times c, m, \frac{k-1}{p}\times y\right]_{(t+1)\times(p+1)};$$

$\overline{WMRY}$面上各点的颜色值模型如下：

$$\overline{WMRY}(j,k)=\left[0, \frac{j-1}{n}\times m, \frac{k-1}{p}\times y\right]_{(n+1)\times(p+1)};$$

$\overline{CBKG}$面上各点的颜色值模型如下：

$$\overline{GBKG}(j,k)=\left[c, \frac{j-1}{n}\times m, \frac{k-1}{p}\times y\right]_{(n+1)\times(p+1)}。$$

8.一种针对权利要求1至7中任意一项所述一种网格化CMY颜色空间的网格点阵列模型构建方法的应用，其特征在于：将所述CMY颜色空间网格点阵列模型获得CMY颜色空间网格点颜色，存储于数据库中，按如下方式，用于实现对目标颜色的分析；

首选检测获得目标颜色所对应的CMY颜色检测数据，并在数据库中查找该CMY颜色检测

数据所对应的网格点;然后在以该网格点为原点、周围预设半径范围,通过比对的方式,获得目标颜色所对应的网格点;最后由该网格点所对应的CMY颜色数据,构成目标颜色所对应的CMY颜色数据。

9.根据权利要求8所述一种针对网格化CMY颜色空间的网格点阵列模型构建方法的应用,其特征在于:采用检色仪针对目标颜色进行检测,获得目标颜色所对应的CMY颜色检测数据。

一种网格化CMY颜色空间的网格点阵列模型构建方法及应用

技术领域

[0001]　　本发明涉及一种网格化CMY颜色空间的网格点阵列模型构建方法及应用,属于颜色空间网格构建技术领域。

背景技术

[0002]　　在颜色设计过程中,需要运用数学模型对CMY颜色空间进行数字化表达,对其色谱进行可视化展示。例如,CMY颜色空间8个顶点之间两两连接可得到12根棱线、12根面对角线及4根体对角线,这些线段的颜色分布规律需要运用颜色值及其直观颜色进行表达;CMY颜色空间还包含6个外表面以及分别与C轴、M轴、G轴垂直的若干切面,这些面上的颜色分布规律,需要用运用颜色值及其直观颜色进行表达。通过对CMY颜色空间中点、线、面的颜色分布运用颜色值及其直观颜色进行表达,才能实现颜色的数字化设计及其色谱的可视化。

[0003]　　CMY颜色空间包含10^6个像素点,在工业化应用过程中会带来过多的数据沉余,在颜色设计过程中,通常需要掌握两基色混合的二次色、以及三基色混合的三次色的变化规律、及其可视化色谱。通过CMY颜色空间中8个顶点之间的两两连接,可得到12根棱线、12根面对角线及4根体对角线,这些连线上的颜色分布可通过两基色混合的二次色色谱得到,目前尚缺少有效模型对其进行数字化表达,对其色谱进行可视化展示。

[0004]　　在CMY颜色空间中,六个外表面以及分别与C轴、M轴、G轴垂直的若干切面,这些面上的颜色分布规律可通过三基色的三次混合色谱得到,目前也缺少有效模型对其进行数字化表达,对其色谱进行可视化展示。

发明内容

[0005]　　本发明所要解决的技术问题是提供一种网格化CMY颜色空间的网格点阵列模型构建方法,引入数字量化过程,实现CMY颜色空间颜色的可视化。

[0006]　　本发明为了解决上述技术问题采用以下技术方案:本发明设计了一种网格化CMY颜色空间的网格点阵列模型构建方法,基于CMY颜色空间的正六面体进行网格划分,对其网格点阵列模型的构建,包括如下步骤:

[0007]　　步骤A.以正六面体上其中一顶点对应白色颜色值0,该顶点所连三根棱上的另一端分别对应CMY颜色空间中的青色颜色值c、品红色颜色值m、黄色颜色值y,构建CMY颜色空间所对应的立方体空间,然后进入步骤B;

[0008]　　步骤B.针对白色所对应顶点与青色所对应顶点之间的棱,执行t等分,即获得包含该棱两端顶点在内的t+1个点,对其中各网格点依次编号为1、2、…、t+1;;

[0009]　　针对白色所对应顶点与品红色所对应顶点之间的棱,执行n等分,即获得包含该棱两端顶点在内的n+1个点,对其中各网格点依次编号为1、2、…、n+1;

[0010]　　针对白色所对应顶点与黄色所对应顶点之间的棱,执行p等分,即获得包含该棱两端顶点在内的p+1个点,对其中各网格点依次编号为1、2、…、p+1;然后进入步骤C;

[0011]　　步骤C.根据三维坐标原理,基于由白点出发的三根棱上的划分,则构成(t+1)(n+

8

1）（p+1）个网格点，则设以网格点编号定义的网格点坐标为ω（i，j，k）如下，然后进入步骤D；

[0012]　　ω（i，j，k）＝[（i-1）/t，（j-1）/n，（k-1）/p]；

[0013]　　i＝1，2，…，t+1；j＝1，2，…，n+1；k＝1，2，…，p+1；

[0014]　　步骤D.获得CMY颜色空间的网格点阵列矩阵表达如下，然后进入步骤E；

[0015]
$$\left[\omega(i,j,k)\right]_{(t+1)\times(n+1)\times(p+1)} = \begin{bmatrix} \omega(t+1,1,k) & \omega(t+1,2,k) & \cdots & \omega(t+1,j,k) & \cdots & \omega(t+1,n+1,k) \\ \vdots & \vdots & \cdots & \vdots & \cdots & \vdots \\ \omega(i,1,k) & \omega(i,2,k) & \cdots & \omega(i,j,k) & \cdots & \omega(i,n+1,k) \\ \vdots & \vdots & \cdots & \vdots & \cdots & \vdots \\ \omega(2,1,k) & \omega(2,2,k) & \cdots & \omega(2,j,k) & \cdots & \omega(2,n+1,k) \\ \omega(1,1,k) & \omega(1,2,k) & \cdots & \omega(1,j,k) & \cdots & \omega(1,n+1,k) \end{bmatrix}_{(t+1)\times(n+1)\times(p+1)} ;$$

[0016]　　步骤E.将CMY颜色空间内各网格点坐标值作变换，获得各网格点颜色值$\varphi(i,j,k)$如下，然后进入步骤F；

[0017]
$$\varphi(i,j,k) = \left[\frac{i-1}{t}\times c, \frac{j-1}{n}\times m, \frac{k-1}{p}\times y\right];$$

[0018]　　步骤F.将CMY颜色空间各网格颜色值$\varphi(i,j,k)$带入网格点阵列矩阵中，可得到CMY颜色空间的网格点阵列颜色矩阵如下：

[0019]
$$\left[\varphi(i,j,k)\right]_{(t+1)\times(n+1)\times(p+1)} = \begin{bmatrix} \left(\frac{i-1}{t}\times c, m, 0\right) & \left(\frac{i-1}{t}\times c, m, \frac{y}{p}\right) & \cdots & \left(\frac{i-1}{t}\times c, m, \frac{k-1}{p}\times y\right) & \cdots & \left(\frac{i-1}{t}\times c, m, y\right) \\ \vdots & \vdots & \cdots & \vdots & \cdots & \vdots \\ \left(\frac{i-1}{t}\times c, \frac{j-1}{n}\times m, 0\right) & \left(\frac{i-1}{t}\times c, \frac{j-1}{n}\times m, \frac{y}{p}\right) & \cdots & \left(\frac{i-1}{t}\times c, \frac{j-1}{n}\times m, \frac{k-1}{p}\times y\right) & \cdots & \left(\frac{i-1}{t}\times c, \frac{j-1}{n}\times m, y\right) \\ \vdots & \vdots & \cdots & \vdots & \cdots & \vdots \\ \left(\frac{i-1}{t}\times c, \frac{m}{n}, 0\right) & \left(\frac{i-1}{t}\times c, \frac{m}{n}, \frac{y}{p}\right) & \cdots & \left(\frac{i-1}{t}\times c, \frac{m}{n}, \frac{k-1}{p}\times y\right) & \cdots & \left(\frac{i-1}{t}\times c, \frac{g}{n}, y\right) \\ \left(\frac{i-1}{t}\times c, 0, 0\right) & \left(\frac{i-1}{t}\times c, 0, \frac{y}{p}\right) & \cdots & \left(\frac{i-1}{t}\times c, 0, \frac{k-1}{p}\times y\right) & \cdots & \left(\frac{i-1}{t}\times c, 0, y\right) \end{bmatrix}_{(t+1)\times(n+1)\times(p+1)} 。$$

[0020]　　作为本发明的一种优选技术方案：基于步骤A至步骤F，针对该方体空间中任意两点a和b，结合点a的颜色值（c_1，m_1，y_1）、点b的颜色值（c_2，m_2，y_2），以及对该两点之间连线的L等分，构建该两点之间连线上各点的颜色值模型如下：

[0021]
$$\overline{ab}(l) = \left(\frac{L+1-l}{L}\times c_1 + \frac{l-1}{L}\times c_2, \frac{L+1-l}{L}\times m_1 + \frac{l-1}{L}\times m_2, \frac{L+1-l}{L}\times y_1 + \frac{l-1}{L}\times y_2\right)$$

[0022]　　其中，l＝1、…、L+1，l表示该两点连线上由点a至点b方向、包含点a和点b在内各位置中的各点的序号。

[0023]　　作为本发明的一种优选技术方案：基于步骤A至步骤F，定义立方体空间中白色所对应顶点为点W、青色所对应顶点为点C、品红色所对应顶点为点M、黄色所对应顶点为点Y，则点W、点C、点M所在面的另一顶点为蓝色所对应点B，点W、点C、点Y所在面的另一顶点为绿色所对应点G，点W、点M、点Y所在面的另一顶点为红色所对应点R，点B、点M、点R所在面的另一顶点为黑色所对应点K；

[0024]　　则从点W出发，棱$\overline{WC}$基于t等分、其上各点的颜色值模型如下：

[0025] $\overline{WC}(i) = \left(\dfrac{i-1}{t} \times c, 0, 0 \right)$;

[0026] 从点M出发,棱 $\overline{MB}$ 基于t等分、其上各点的颜色值模型如下:

[0027] $\overline{MB}(i) = \left(\dfrac{i-1}{t} \times c, m, 0 \right)$;

[0028] 从点R出发,棱 $\overline{RK}$ 基于t等分、其上各点的颜色值模型如下:

[0029] $\overline{RK}(i) = \left(\dfrac{i-1}{t} \times c, m, y \right)$;

[0030] 从点Y出发,棱 $\overline{YG}$ 基于t等分、其上各点的颜色值模型如下:

[0031] $\overline{YG}(i) = \left(\dfrac{i-1}{t} \times c, 0, y \right)$;

[0032] 从点W出发,棱 $\overline{WM}$ 基于n等分、其上各点的颜色值模型如下:

[0033] $\overline{WM}(j) = \left(0, \dfrac{j-1}{n} \times m, 0 \right)$;

[0034] 从点C出发,棱 $\overline{CB}$ 基于n等分、其上各点的颜色值模型如下:

[0035] $\overline{CB}(j) = \left(c, \dfrac{j-1}{n} \times m, 0 \right)$;

[0036] 从点G出发,棱 $\overline{GK}$ 基于n等分、其上各点的颜色值模型如下:

[0037] $\overline{GK}(j) = \left(c, \dfrac{j-1}{n} \times m, y \right)$;

[0038] 从点Y出发,棱 $\overline{YR}$ 基于n等分、其上各点的颜色值模型如下:

[0039] $\overline{YR}(j) = \left(0, \dfrac{j-1}{n} \times m, y \right)$;

[0040] 从点W出发,棱 $\overline{WY}$ 基于p等分、其上各点的颜色值模型如下:

[0041] $\overline{WY}(k) = \left(0, 0, \dfrac{k-1}{p} \times y \right)$;

[0042] 从点C出发,棱 $\overline{CG}$ 基于p等分、其上各点的颜色值模型如下:

[0043] $\overline{CG}(k) = \left(c, 0, \dfrac{k-1}{p} \times y \right)$;

[0044] 从点B出发,棱 $\overline{BK}$ 基于p等分、其上各点的颜色值模型如下:

[0045] $\overline{BK}(k) = \left(c, m, \dfrac{k-1}{p} \times y \right)$;

[0046] 从点M出发,棱 $\overline{MR}$ 基于p等分、其上各点的颜色值模型如下:

[0047] $\overline{MR}(k) = \left(0, m, \dfrac{k-1}{p} \times y\right)$。

[0048] 作为本发明的一种优选技术方案：基于步骤A至步骤F，则 $\overline{WCBM}$ 面中对角线 $\overline{CM}$ 基于L等分、其上各点的颜色值模型如下：

[0049] $\overline{CM}(l) = \left(\dfrac{L+1-l}{L} \times c, \dfrac{l-1}{L} \times m, 0\right)$；

[0050] 对角线 $\overline{WB}$ 基于L等分、其上各点的颜色值模型如下：

[0051] $\overline{WB}(l) = \left(\dfrac{l-1}{L} \times c, \dfrac{l-1}{L} \times m, 0\right)$；

[0052] 则 $\overline{GKRY}$ 面中对角线 $\overline{GR}$ 基于L等分、其上各点的颜色值模型如下：

[0053] $\overline{GR}(l) = \left(\dfrac{L+1-l}{L} \times c, \dfrac{l-1}{L} \times m, y\right)$；

[0054] 对角线 $\overline{YK}$ 基于L等分、其上各点的颜色值模型如下：

[0055] $\overline{YK}(l) = \left(\dfrac{l-1}{L} \times c, \dfrac{l-1}{L} \times m, y\right)$；

[0056] 则 $\overline{WCGY}$ 面中对角线 $\overline{CY}$ 基于L等分、其上各点的颜色值模型如下：

[0057] $\overline{CY}(l) = \left(\dfrac{L+1-l}{L} \times c, 0, \dfrac{l-1}{L} \times y\right)$；

[0058] 对角线 $\overline{WG}$ 基于L等分、其上各点的颜色值模型如下：

[0059] $\overline{WG}(l) = \left(\dfrac{l-1}{L} \times c, 0, \dfrac{l-1}{L} \times y\right)$；

[0060] 则 $\overline{MBKR}$ 面中对角线 $\overline{BR}$ 基于L等分、其上各点的颜色值模型如下：

[0061] $\overline{BR}(l) = \left(\dfrac{L+1-l}{L} \times c, m, \dfrac{l-1}{L} \times y\right)$；

[0062] 对角线 $\overline{MK}$ 基于L等分、其上各点的颜色值模型如下：

[0063] $\overline{MK}(l) = \left(\dfrac{l-1}{L} \times c, m, \dfrac{l-1}{L} \times y\right)$；

[0064] 则 $\overline{WMRY}$ 面中对角线 $\overline{MY}$ 基于L等分、其上各点的颜色值模型如下：

[0065] $\overline{MY}(l) = \left(0, \dfrac{L+1-l}{L} \times m, \dfrac{l-1}{L} \times y\right)$；

[0066] 对角线 $\overline{WR}$ 基于L等分、其上各点的颜色值模型如下：

[0067] $\overline{WR}(l) = \left(0, \dfrac{l-1}{L} \times m, \dfrac{l-1}{L} \times y\right)$；

[0068] 则 $\overline{CBKG}$ 面中对角线 $\overline{BG}$ 基于L等分、其上各点的颜色值模型如下：

[0069] $\overline{BG}(l) = \left(c, \dfrac{L+1-l}{L} \times m, \dfrac{l-1}{L} \times y \right)$;

[0070] 对角线 $\overline{CK}$ 基于L等分、其上各点的颜色值模型如下：

[0071] $\overline{CK}(l) = \left(c, \dfrac{l-1}{L} \times m, \dfrac{l-1}{L} \times y \right)$ 。

[0072] 作为本发明的一种优选技术方案：基于步骤A至步骤F，则体对角线 $\overline{WK}$ 基于L等分、其上各点的颜色值模型如下：

[0073] $\overline{WK}(l) = \left(\dfrac{l-1}{L} \times c, \dfrac{l-1}{L} \times m, \dfrac{l-1}{L} \times y \right)$;

[0074] 体对角线YB基于L等分、其上各点的颜色值模型如下：

[0075] $\overline{YB}(l) = \left(\dfrac{l-1}{L} \times c, \dfrac{l-1}{L} \times m, \dfrac{L+1-l}{L} \times y \right)$;

[0076] 体对角线 $\overline{GM}$ 基于L等分、其上各点的颜色值模型如下：

[0077] $\overline{GM}(l) = \left(\dfrac{L+1-l}{L} \times c, \dfrac{l-1}{L} \times m, \dfrac{L+1-l}{L} \times y \right)$;

[0078] 体对角线 $\overline{CR}$ 基于L等分、其上各点的颜色值模型如下：

[0079] $\overline{CR}(l) = \left(\dfrac{L+1-l}{L} \times c, \dfrac{l-1}{L} \times m, \dfrac{l-1}{L} \times y \right)$ 。

[0080] 作为本发明的一种优选技术方案：基于步骤A至步骤F，定义立方体空间中白色所对应顶点为点W、青色所对应顶点为点C、品红色所对应顶点为点M、黄色所对应顶点为点Y，则点W、点C、点M所在面的另一顶点为蓝色所对应点B，点W、点C、点Y所在面的另一顶点为绿色所对应点G，点W、点M、点Y所在面的另一顶点为红色所对应点R，点B、点M、点R所在面的另一顶点为黑色所对应点K；根据 $\overline{WC}$ 的t等分、$\overline{WM}$ 的n等分、$\overline{WY}$ 的p等分，则基于i＝1、…、t+1，与 $\overline{WC}$ 相垂直t+1个剖面颜色值模型矩阵分别如下：

[0081] $\left[\dfrac{i-1}{t} \times c, \dfrac{j-1}{n} \times m, \dfrac{k-1}{p} \times y \right]_{(n+1)\times(p+1)}$

[0082] 基于j＝1、…、n+1，与 $\overline{WM}$ 相垂直n+1个剖面颜色值模型矩阵分别如下：

[0083] $\left[\dfrac{i-1}{t} \times c, \dfrac{j-1}{n} \times m, \dfrac{k-1}{p} \times y \right]_{(t+1)\times(p+1)}$

[0084] 基于k＝1、…、p+1，与 $\overline{WY}$ 相垂直p+1剖面颜色值模型矩阵分别如下：

[0085] $\left[\dfrac{i-1}{t} \times c, \dfrac{j-1}{n} \times m, \dfrac{k-1}{p} \times y \right]_{(n+1)\times(t+1)}$ 。

[0086]　　作为本发明的一种优选技术方案:基于步骤A至步骤F,根据$\overline{WC}$的t等分、$\overline{WM}$的n等分、$\overline{WY}$的p等分,则$\overline{WCBM}$面上颜色值模型如下:

[0087]
$$\overline{WCBM}(i,j)=\left[\frac{i-1}{t}\times c,\frac{j-1}{n}\times m,0\right]_{(t+1)\times(n+1)};$$

[0088]　　$\overline{GKRY}$面上颜色值模型如下:

[0089]
$$\overline{GKRY}(i,j)=\left[\frac{i-1}{t}\times c,\frac{j-1}{n}\times m,y\right]_{(t+1)\times(n+1)};$$

[0090]　　$\overline{WCGY}$面上各点的颜色值模型如下:

[0091]
$$\overline{WCGY}(i,k)=\left[\frac{i-1}{t}\times c,0,\frac{k-1}{p}\times y\right]_{(t+1)\times(p+1)};$$

[0092]　　$\overline{MBKR}$面上各点的颜色值模型如下:

[0093]
$$\overline{MBKR}(i,k)=\left[\frac{i-1}{t}\times c,m,\frac{k-1}{p}\times y\right]_{(t+1)\times(p+1)};$$

[0094]　　$\overline{WMRY}$面上各点的颜色值模型如下:

[0095]
$$\overline{WMRY}(j,k)=\left[0,\frac{j-1}{n}\times m,\frac{k-1}{p}\times y\right]_{(n+1)\times(p+1)};$$

[0096]　　$\overline{CBKG}$面上各点的颜色值模型如下:

[0097]
$$\overline{GBKG}(j,k)=\left[c,\frac{j-1}{n}\times m,\frac{k-1}{p}\times y\right]_{(n+1)\times(p+1)}。$$

[0098]　　与上述相对应,本发明进一步设计了一种针对网格化CMY颜色空间的网格点阵列模型构建方法的应用,将所述CMY颜色空间网格点阵列模型获得CMY颜色空间网格点颜色,存储于数据库中,按如下方式,用于实现对目标颜色的分析;

[0099]　　首选检测获得目标颜色所对应的CMY颜色检测数据,并在数据库中查找该CMY颜色检测数据所对应的网格点;然后在以该网格点为原点、周围预设半径范围,通过比对的方式,获得目标颜色所对应的网格点;最后由该网格点所对应的CMY颜色数据,构成目标颜色所对应的CMY颜色数据。

[0100]　　作为本发明的一种优选技术方案:采用检色仪针对目标颜色进行检测,获得目标颜色所对应的CMY颜色检测数据。

[0101]　　本发明所述一种网格化CMY颜色空间的网格点阵列模型构建方法及应用,采用以上技术方案与现有技术相比,具有以下技术效果:

[0102]　　本发明所设计网格化CMY颜色空间的网格点阵列模型构建方法及应用,通过对C、M、Y轴的网格化划分,实现对CMY颜色空间内一维直线、二维平面、三维立体的网格划分,以此构建CMY颜色空间的网格化阵列模型,并通过对CMY颜色空间内各点、线、面、体的网格点阵列矩阵与阵列颜色矩阵的构建实现对应色谱的数字化表达。在实际应用中,上述模型及

算法可自行设定网格化精度,调用各组模型算法实现网格化色谱的可视化,有效提高了颜色的分析与选择效率。

附图说明

[0103] 图1是本发明所设计网格化CMY颜色空间的网格点阵列模型构建方法流程图;

[0104] 图2是本发明所设计网格化CMY颜色空间的网格点阵列模型构建方法所对应六面体结构示意图;

[0105] 图3是本发明所设计网格化CMY颜色空间的网格点阵列模型构建方法所对应六面体颜色示意图。

具体实施方式

[0106] 下面结合说明书附图对本发明的具体实施方式作进一步详细的说明。

[0107] 本发明设计了一种网格化CMY颜色空间的网格点阵列模型构建方法,基于CMY颜色空间的正六面体进行网格划分,对其网格点阵列模型的构建,如图1所示,包括如下步骤A至步骤F。

[0108] 步骤A.以正六面体上其中一顶点对应白色颜色值0,该顶点所连三根棱上的另一端分别对应CMY颜色空间中的青色颜色值c、品红色颜色值m、黄色颜色值y,构建CMY颜色空间所对应的立方体空间,然后进入步骤B。

[0109] 步骤B.针对白色所对应顶点与青色所对应顶点之间的棱,执行t等分,即获得包含该棱两端顶点在内的t+1个点,对其中各网格点依次编号为1、2、…、t+1;;

[0110] 针对白色所对应顶点与品红色所对应顶点之间的棱,执行n等分,即获得包含该棱两端顶点在内的n+1个点,对其中各网格点依次编号为1、2、…、n+1;

[0111] 针对白色所对应顶点与黄色所对应顶点之间的棱,执行p等分,即获得包含该棱两端顶点在内的p+1个点,对其中各网格点依次编号为1、2、…、p+1;然后进入步骤C;

[0112] 步骤C.根据三维坐标原理,基于由白点出发的三根棱上的划分,则构成$(t+1)(n+1)(p+1)$个网格点,则设以网格点编号定义的网格点坐标为$\omega(i,j,k)$如下,然后进入步骤D;

[0113] $\omega(i,j,k)=[(i-1)/t,(j-1)/n,(k-1)/p]$;

[0114] $i=1,2,\ldots,t+1$;$j=1,2,\ldots,n+1$;$k=1,2,\ldots,p+1$;

[0115] 步骤D.获得CMY颜色空间的网格点阵列矩阵表达如下,然后进入步骤E;

[0116]
$$\left[\omega(i,j,k)\right]_{(t+1)\times(n+1)\times(p+1)}=\begin{bmatrix} \omega(t+1,1,k) & \omega(t+1,2,k) & \cdots & \omega(t+1,j,k) & \cdots & \omega(t+1,n+1,k) \\ \vdots & \vdots & \cdots & \vdots & \cdots & \vdots \\ \omega(i,1,k) & \omega(i,2,k) & \cdots & \omega(i,j,k) & \cdots & \omega(i,n+1,k) \\ \vdots & \vdots & \cdots & \vdots & \cdots & \vdots \\ \omega(2,1,k) & \omega(2,2,k) & \cdots & \omega(2,j,k) & \cdots & \omega(2,n+1,k) \\ \omega(1,1,k) & \omega(1,2,k) & \cdots & \omega(1,j,k) & \cdots & \omega(1,n+1,k) \end{bmatrix}_{(t+1)\times(n+1)\times(p+1)};$$

[0117] 步骤E.将CMY颜色空间内各网格点坐标值作变换,获得各网格点颜色值$\varphi(i,j,k)$如下,然后进入步骤F;

[0118]
$$\varphi(i,j,k)=\left[\frac{i-1}{t}\times c, \frac{j-1}{n}\times m, \frac{k-1}{p}\times y\right];$$

[0119]　　步骤F.将CMY颜色空间各网格颜色值$\varphi(i,j,k)$带入网格点阵列矩阵中,可得到CMY颜色空间的网格点阵列颜色矩阵如下:

[0120]
$$[\varphi(i,j,k)]_{(t+1)\times(n+1)\times(p+1)}=\begin{bmatrix}\left(\frac{i-1}{t}\times c,m,0\right) & \left(\frac{i-1}{t}\times c,m,\frac{y}{p}\right) & \cdots & \left(\frac{i-1}{t}\times c,m,\frac{k-1}{p}\times y\right) & \cdots & \left(\frac{i-1}{t}\times c,m,y\right)\\ \vdots & \vdots & \cdots & \vdots & \cdots & \vdots\\ \left(\frac{i-1}{t}\times c,\frac{j-1}{n}\times m,0\right) & \left(\frac{i-1}{t}\times c,\frac{j-1}{n}\times m,\frac{y}{p}\right) & \cdots & \left(\frac{i-1}{t}\times c,\frac{j-1}{n}\times m,\frac{k-1}{p}\times y\right) & \cdots & \left(\frac{i-1}{t}\times c,\frac{j-1}{n}\times m,y\right)\\ \vdots & \vdots & \cdots & \vdots & \cdots & \vdots\\ \left(\frac{i-1}{t}\times c,\frac{m}{n},0\right) & \left(\frac{i-1}{t}\times c,\frac{m}{n},\frac{y}{p}\right) & \cdots & \left(\frac{i-1}{t}\times c,\frac{m}{n},\frac{k-1}{p}\times y\right) & \cdots & \left(\frac{i-1}{t}\times c,\frac{g}{n},y\right)\\ \left(\frac{i-1}{t}\times c,0,0\right) & \left(\frac{i-1}{t}\times c,0,\frac{y}{p}\right) & \cdots & \left(\frac{i-1}{t}\times c,0,\frac{k-1}{p}\times y\right) & \cdots & \left(\frac{i-1}{t}\times c,0,y\right)\end{bmatrix}_{(t+1)\times(n+1)\times(p+1)}。$$

[0121]　　则在实际应用当中,针对该方体空间中任意两点a和b,结合点a的颜色值(c_1,m_1,y_1)、点b的颜色值(c_2,m_2,y_2),以及对该两点之间连线的L等分,构建该两点之间连线上各点的颜色值模型如下:

[0122]
$$\overline{ab}(l)=\left(\frac{L+1-l}{L}\times c_1+\frac{l-1}{L}\times c_2, \frac{L+1-l}{L}\times m_1+\frac{l-1}{L}\times m_2, \frac{L+1-l}{L}\times y_1+\frac{l-1}{L}\times y_2\right)$$

[0123]　　其中,l=1、⋯L+1,l表示该两点连线上由点a至点b方向、包含点a和点b在内各位置中的各点的序号。

[0124]　　实际应用当中,定义立方体空间中白色所对应顶点为点W、青色所对应顶点为点C、品红色所对应顶点为点M、黄色所对应顶点为点Y,则点W、点C、点M所在面的另一顶点为蓝色所对应点B,点W、点C、点Y所在面的另一顶点为绿色所对应点G,点W、点M、点Y所在面的另一顶点为红色所对应点R,点B、点M、点R所在面的另一顶点为黑色所对应点K,则该各点的颜色值如下:

[0125]
$$\begin{bmatrix}W\\C\\M\\Y\\K\\R\\G\\B\end{bmatrix}=\begin{bmatrix}(0,0,0)\\(c,0,0)\\(0,m,0)\\(0,0,y)\\(c,m,y)\\(0,m,y)\\(c,0,y)\\(c,m,0)\end{bmatrix}$$

[0126]　　则对于CMY颜色空间上的12条棱来说,如图2所示,分析如下:

[0127]　　从点W出发,棱$\overline{WC}$基于t等分、其上各点的颜色值模型如下:

[0128]
$$\overline{WC}(i)=\left(\frac{i-1}{t}\times c,0,0\right);$$

[0129]　　将其展开,即(t+1)×1维度矩阵如下:

15

[0130] $$\left[(0,0,0) \quad \left(\frac{c}{t},0,0\right) \quad \cdots \quad \left(\frac{i-1}{t}\times c,0,0\right) \quad \cdots \quad (c,0,0) \right]_。$$

[0131] 从点M出发,棱$\overline{MB}$基于t等分、其上各点的颜色值模型如下:

[0132] $$\overline{MB}(i) = \left(\frac{i-1}{t}\times c,m,0\right);$$

[0133] 将其展开,即(t+1)×1维度矩阵如下:

[0134] $$\left[(0,m,0) \quad \left(\frac{c}{t},m,0\right) \quad \cdots \quad \left(\frac{i-1}{t}\times c,m,0\right) \quad \cdots \quad (c,m,0) \right]_。$$

[0135] 从点R出发,棱$\overline{RK}$基于t等分、其上各点的颜色值模型如下:

[0136] $$\overline{RK}(i) = \left(\frac{i-1}{t}\times c,m,y\right);$$

[0137] 将其展开,即(t+1)×1维度矩阵如下:

[0138] $$\left[(0,m,y) \quad \left(\frac{c}{t},m,y\right) \quad \cdots \quad \left(\frac{i-1}{t}\times c,m,y\right) \quad \cdots \quad (c,m,y) \right]_。$$

[0139] 从点Y出发,棱$\overline{YG}$基于t等分、其上各点的颜色值模型如下:

[0140] $$\overline{YG}(i) = \left(\frac{i-1}{t}\times c,0,y\right);$$

[0141] 将其展开,即(t+1)×1维度矩阵如下:

[0142] $$\left[(0,0,y) \quad \left(\frac{c}{t},0,y\right) \quad \cdots \quad \left(\frac{i-1}{t}\times c,0,y\right) \quad \cdots \quad (c,0,y) \right]_。$$

[0143] 从点W出发,棱$\overline{WM}$基于n等分、其上各点的颜色值模型如下:

[0144] $$\overline{WM}(j) = \left(0,\frac{j-1}{n}\times m,0\right);$$

[0145] 将其展开,即(n+1)×1维度矩阵如下:

[0146] $$\left[(0,0,0) \quad \left(0,\frac{m}{n},0\right) \quad \cdots \quad \left(0,\frac{j-1}{n}\times m,0\right) \quad \cdots \quad (0,m,0) \right]_。$$

[0147] 从点C出发,棱$\overline{CB}$基于n等分、其上各点的颜色值模型如下:

[0148] $$\overline{CB}(j) = \left(c,\frac{j-1}{n}\times m,0\right);$$

[0149] 将其展开,即(n+1)×1维度矩阵如下:

[0150] $$\left[(c,0,0) \quad \left(c,\frac{m}{n},0\right) \quad \cdots \quad \left(c,\frac{j-1}{n}\times m,0\right) \quad \cdots \quad (c,m,0) \right]_。$$

[0151] 从点G出发,棱$\overline{GK}$基于n等分、其上各点的颜色值模型如下:

[0152] $\overline{GK}(j)=\left(c,\dfrac{j-1}{n}\times m,y\right)$；

[0153] 将其展开，即 (n+1)×1 维度矩阵如下：

[0154] $\left[\begin{array}{ccccc}(c,0,y) & \left(c,\dfrac{m}{n},y\right) & \cdots & \left(c,\dfrac{j-1}{n}\times m,y\right) & \cdots & (c,m,y)\end{array}\right]$。

[0155] 从点 Y 出发，棱 $\overline{YR}$ 基于 n 等分、其上各点的颜色值模型如下：

[0156] $\overline{YR}(j)=\left(0,\dfrac{j-1}{n}\times m,y\right)$；

[0157] 将其展开，即 (n+1)×1 维度矩阵如下：

[0158] $\left[\begin{array}{ccccc}(0,0,y) & \left(0,\dfrac{m}{n},y\right) & \cdots & \left(0,\dfrac{j-1}{n}\times m,y\right) & \cdots & (0,m,y)\end{array}\right]$。

[0159] 从点 W 出发，棱 $\overline{WY}$ 基于 p 等分、其上各点的颜色值模型如下：

[0160] $\overline{WY}(k)=\left(0,0,\dfrac{k-1}{p}\times y\right)$；

[0161] 将其展开，即 (p+1)×1 维度矩阵如下：

[0162] $\left[\begin{array}{ccccc}(0,0,0) & \left(0,0,\dfrac{y}{p}\right) & \cdots & \left(0,0,\dfrac{k-1}{p}\times y\right) & \cdots & (0,0,y)\end{array}\right]$。

[0163] 从点 C 出发，棱 $\overline{CG}$ 基于 p 等分、其上各点的颜色值模型如下：

[0164] $\overline{CG}(k)=\left(c,0,\dfrac{k-1}{p}\times y\right)$；

[0165] 将其展开，即 (p+1)×1 维度矩阵如下：

[0166] $\left[\begin{array}{ccccc}(c,0,0) & \left(c,0,\dfrac{y}{p}\right) & \cdots & \left(c,0,\dfrac{k-1}{p}\times y\right) & \cdots & (c,0,y)\end{array}\right]$。

[0167] 从点 B 出发，棱 $\overline{BK}$ 基于 p 等分、其上各点的颜色值模型如下：

[0168] $\overline{BK}(k)=\left(c,m,\dfrac{k-1}{p}\times y\right)$；

[0169] 将其展开，即 (p+1)×1 维度矩阵如下：

[0170] $\left[\begin{array}{ccccc}(c,m,0) & \left(c,m,\dfrac{y}{p}\right) & \cdots & \left(c,m,\dfrac{k-1}{p}\times y\right) & \cdots & (c,m,y)\end{array}\right]$。

[0171] 从点 M 出发，棱 $\overline{MR}$ 基于 p 等分、其上各点的颜色值模型如下：

[0172] $\overline{MR}(k)=\left(0,m,\dfrac{k-1}{p}\times y\right)$；

[0173] 将其展开，即 (p+1)×1 维度矩阵如下：

[0174]
$$\left[\begin{array}{ccccc} (0,m,0) & \left(0,m,\dfrac{y}{p}\right) & \cdots & \left(0,m,\dfrac{k-1}{p}\times y\right) & \cdots & (0,m,y) \end{array} \right]。$$

[0175]　　实际应用中,进一步对于CMY颜色空间上各个面的对角线来说,其中,$\overline{WCBM}$ 面中对角线 $\overline{CM}$ 基于L等分、其上各点的颜色值模型如下:

[0176]
$$\overline{CM}(l)=\left(\frac{L+1-l}{L}\times c,\frac{l-1}{L}\times m,0\right);$$

[0177]　　将其展开,即 (L+1)×1 维度矩阵如下:

[0178]
$$\left[\begin{array}{ccccc} (c,0,0) & \left(\dfrac{L-1}{L}\times c,\dfrac{m}{L},0\right) & \cdots & \left(\dfrac{L+1-l}{L}\times c,\dfrac{l-1}{L}\times m,0\right) & \cdots & (0,m,0) \end{array} \right]。$$

[0179]　　对角线 $\overline{WB}$ 基于L等分、其上各点的颜色值模型如下:

[0180]
$$\overline{WB}(l)=\left(\frac{l-1}{L}\times c,\frac{l-1}{L}\times m,0\right);$$

[0181]　　将其展开,即 (L+1)×1 维度矩阵如下:

[0182]
$$\left[\begin{array}{ccccc} (0,0,0) & \left(\dfrac{c}{L},\dfrac{m}{L},0\right) & \cdots & \left(\dfrac{l-1}{L}\times c,\dfrac{l-1}{L}\times m,0\right) & \cdots & (c,m,0) \end{array} \right]。$$

[0183]　　则 $\overline{GKRY}$ 面中对角线 $\overline{GR}$ 基于L等分、其上各点的颜色值模型如下:

[0184]
$$\overline{GR}(l)=\left(\frac{L+1-l}{L}\times c,\frac{l-1}{L}\times m,y\right);$$

[0185]　　将其展开,即 (L+1)×1 维度矩阵如下:

[0186]
$$\left[\begin{array}{ccccc} (c,0,y) & \left(\dfrac{L-1}{L}\times c,\dfrac{m}{L},y\right) & \cdots & \left(\dfrac{L+1-l}{L}\times c,\dfrac{l-1}{L}\times m,y\right) & \cdots & (0,m,y) \end{array} \right]。$$

[0187]　　对角线 $\overline{YK}$ 基于L等分、其上各点的颜色值模型如下:

[0188]
$$\overline{YK}(l)=\left(\frac{l-1}{L}\times c,\frac{l-1}{L}\times m,y\right);$$

[0189]　　将其展开,即 (L+1)×1 维度矩阵如下:

[0190]
$$\left[\begin{array}{ccccc} (0,0,y) & \left(\dfrac{c}{L},\dfrac{m}{L},y\right) & \cdots & \left(\dfrac{l-1}{L}\times c,\dfrac{l-1}{L}\times m,y\right) & \cdots & (c,m,y) \end{array} \right]。$$

[0191]　　则 $\overline{WCGY}$ 面中对角线 $\overline{CY}$ 基于L等分、其上各点的颜色值模型如下:

[0192]
$$\overline{CY}(l)=\left(\frac{L+1-l}{L}\times c,0,\frac{l-1}{L}\times y\right);$$

[0193]　　将其展开,即 (L+1)×1 维度矩阵如下:

[0194]
$$\left[\begin{array}{ccccc} (c,0,0) & \left(\dfrac{L-1}{L}\times c,0,\dfrac{y}{L}\right) & \cdots & \left(\dfrac{L+1-l}{L}\times c,0,\dfrac{l-1}{L}\times y\right) & \cdots & (0,0,y) \end{array} \right]。$$

[0195] 对角线 $\overline{WG}$ 基于L等分、其上各点的颜色值模型如下：

[0196] $\overline{WG}(l) = \left(\dfrac{l-1}{L} \times c, 0, \dfrac{l-1}{L} \times y \right)$；

[0197] 将其展开，即 (L+1)×1 维度矩阵如下：

[0198] $\left[(0,0,0) \quad \left(\dfrac{c}{L}, 0, \dfrac{y}{L} \right) \quad \cdots \quad \left(\dfrac{l-1}{L} \times c, 0, \dfrac{l-1}{L} \times y \right) \quad \cdots \quad (c,0,y) \right]$。

[0199] 则 $\overline{MBKR}$ 面中对角线 $\overline{BR}$ 基于L等分、其上各点的颜色值模型如下：

[0200] $\overline{BR}(l) = \left(\dfrac{L+1-l}{L} \times c, m, \dfrac{l-1}{L} \times y \right)$；

[0201] 将其展开，即 (L+1)×1 维度矩阵如下：

[0202] $\left[(c,m,0) \quad \left(\dfrac{L-1}{L} \times c, m, \dfrac{y}{L} \right) \quad \cdots \quad \left(\dfrac{L+1-l}{L} \times c, m, \dfrac{l-1}{L} \times y \right) \quad \cdots \quad (0,m,y) \right]$。

[0203] 对角线 $\overline{MK}$ 基于L等分、其上各点的颜色值模型如下：

[0204] $\overline{MK}(l) = \left(\dfrac{l-1}{L} \times c, m, \dfrac{l-1}{L} \times y \right)$；

[0205] 将其展开，即 (L+1)×1 维度矩阵如下：

[0206] $\left[(0,m,0) \quad \left(\dfrac{c}{L}, m, \dfrac{y}{L} \right) \quad \cdots \quad \left(\dfrac{l-1}{L} \times c, m, \dfrac{l-1}{L} \times y \right) \quad \cdots \quad (c,m,y) \right]$。

[0207] 则 $\overline{WMRY}$ 面中对角线 $\overline{MY}$ 基于L等分、其上各点的颜色值模型如下：

[0208] $\overline{MY}(l) = \left(0, \dfrac{L+1-l}{L} \times m, \dfrac{l-1}{L} \times y \right)$；

[0209] 将其展开，即 (L+1)×1 维度矩阵如下：

[0210] $\left[(0,m,0) \quad \left(0, \dfrac{L-1}{L} \times m, \dfrac{y}{L} \right) \quad \cdots \quad \left(0, \dfrac{L+1-l}{L} \times m, \dfrac{l-1}{L} \times y \right) \quad \cdots \quad (0,0,y) \right]$。

[0211] 对角线 $\overline{WR}$ 基于L等分、其上各点的颜色值模型如下：

[0212] $\overline{WR}(l) = \left(0, \dfrac{l-1}{L} \times m, \dfrac{l-1}{L} \times y \right)$；

[0213] 将其展开，即 (L+1)×1 维度矩阵如下：

[0214] $\left[(0,0,0) \quad \left(0, \dfrac{m}{L}, \dfrac{y}{L} \right) \quad \cdots \quad \left(0, \dfrac{l-1}{L} \times m, \dfrac{l-1}{L} \times y \right) \quad \cdots \quad (0,m,y) \right]$。

[0215] 则 $\overline{CBKG}$ 面中对角线 $\overline{BG}$ 基于L等分、其上各点的颜色值模型如下：

[0216] $\overline{BG}(l) = \left(c, \dfrac{L+1-l}{L} \times m, \dfrac{l-1}{L} \times y \right)$；

[0217] 将其展开，即 (L+1)×1 维度矩阵如下：

[0218]
$$\left[(c,m,0) \quad \left(c,\frac{L-1}{L}\times m,\frac{y}{L}\right) \quad \cdots \quad \left(c,\frac{L+1-l}{L}\times m,\frac{l-1}{L}\times y\right) \quad \cdots \quad (c,0,y)\right]_{\circ}$$

[0219] 对角线$\overline{CK}$基于L等分、其上各点的颜色值模型如下：

[0220]
$$\overline{CK}(l)=\left(c,\frac{l-1}{L}\times m,\frac{l-1}{L}\times y\right);$$

[0221] 将其展开，即(L+1)×1维度矩阵如下：

[0222]
$$\left[(c,0,0) \quad \left(c,\frac{m}{L},\frac{y}{L}\right) \quad \cdots \quad \left(c,\frac{l-1}{L}\times m,\frac{l-1}{L}\times y\right) \quad \cdots \quad (c,m,y)\right]_{\circ}$$

[0223] 相应对于CMY颜色空间上各个体对角线来说，体对角线$\overline{WK}$基于L等分、其上各点的颜色值模型如下：

[0224]
$$\overline{WK}(l)=\left(\frac{l-1}{L}\times c,\frac{l-1}{L}\times m,\frac{l-1}{L}\times y\right);$$

[0225] 将其展开，即(L+1)×1维度矩阵如下：

[0226]
$$\left[(0,0,0) \quad \left(\frac{c}{L},\frac{m}{L},\frac{y}{L}\right) \quad \cdots \quad \left(\frac{l-1}{L}\times c,\frac{l-1}{L}\times m,\frac{l-1}{L}\times y\right) \quad \cdots \quad (c,m,y)\right]_{\circ}$$

[0227] 体对角线$\overline{YB}$基于L等分、其上各点的颜色值模型如下：

[0228]
$$\overline{YB}(l)=\left(\frac{l-1}{L}\times c,\frac{l-1}{L}\times m,\frac{L+1-l}{L}\times y\right);$$

[0229] 将其展开，即(L+1)×1维度矩阵如下：

[0230]
$$\left[(0,0,y) \quad \left(\frac{c}{L},\frac{m}{L},\frac{L-1}{L}\times y\right) \quad \cdots \quad \left(\frac{l-1}{L}\times c,\frac{l-1}{L}\times m,\frac{L+1-l}{L}\times y\right) \quad \cdots \quad (c,m,0)\right]_{\circ}$$

[0231] 体对角线$\overline{GM}$基于L等分、其上各点的颜色值模型如下：

[0232]
$$\overline{GM}(l)=\left(\frac{L+1-l}{L}\times c,\frac{l-1}{L}\times m,\frac{L+1-l}{L}\times y\right);$$

[0233] 将其展开，即(L+1)×1维度矩阵如下：

[0234]
$$\left[(c,0,y) \quad \left(\frac{L-1}{L}\times c,\frac{m}{L},\frac{L-1}{L}\times y\right) \quad \cdots \quad \left(\frac{L+1-l}{L}\times c,\frac{l-1}{L}\times m,\frac{L+1-l}{L}\times y\right) \quad \cdots \quad (0,m,0)\right]_{\circ}$$

[0235] 体对角线$\overline{CR}$基于L等分、其上各点的颜色值模型如下：

[0236]
$$\overline{CR}(l)=\left(\frac{L+1-l}{L}\times c,\frac{l-1}{L}\times m,\frac{l-1}{L}\times y\right);$$

[0237] 将其展开，即(L+1)×1维度矩阵如下：

[0238]
$$\left[(c,0,0) \quad \left(\frac{L-1}{L}\times c,\frac{m}{L},\frac{y}{L}\right) \quad \cdots \quad \left(\frac{L+1-l}{L}\times c,\frac{l-1}{L}\times m,\frac{l-1}{L}\times y\right) \quad \cdots \quad (0,m,y)\right]_{\circ}$$

[0239] 实际应用当中，基于图2所示，根据$\overline{WC}$的t等分、$\overline{WM}$的n等分、$\overline{WY}$的p等分，则基

于i＝1、⋯、t+1，与$\overline{WC}$相垂直t+1个剖面颜色值模型矩阵分别如下：

[0240]
$$\left[\frac{i-1}{t}\times c,\frac{j-1}{n}\times m,\frac{k-1}{p}\times y\right]_{(n+1)\times(p+1)}$$

[0241] 基于j＝1、⋯、n+1，与$\overline{WM}$相垂直n+1个剖面颜色值模型矩阵分别如下：

[0242]
$$\left[\frac{i-1}{t}\times c,\frac{j-1}{n}\times m,\frac{k-1}{p}\times y\right]_{(t+1)\times(p+1)}$$

[0243] 基于k＝1、⋯、p+1，与$\overline{WY}$相垂直p+1剖面颜色值模型矩阵分别如下：

[0244]
$$\left[\frac{i-1}{t}\times c,\frac{j-1}{n}\times m,\frac{k-1}{p}\times y\right]_{(n+1)\times(t+1)}。$$

[0245] (1)在CMY颜色空间中，可得到过$\overline{WC}$段各点、且与$\overline{WC}$垂直的t+1个截面；

[0246] 当i＝1时，截面上各网格点组成的矩阵为：

[0247]
$$\begin{bmatrix}
(0,m,0) & \left(0,m,\dfrac{y}{p}\right) & \cdots & \left(0,m,\dfrac{k-1}{p}\times y\right) & \cdots & (0,m,y) \\
\vdots & \vdots & \vdots & \vdots & \vdots & \vdots \\
\left(0,\dfrac{j-1}{n}\times m,0\right) & \left(0,\dfrac{j-1}{n}\times m,\dfrac{y}{p}\right) & \cdots & \left(0,\dfrac{j-1}{n}\times m,\dfrac{k-1}{p}\times y\right) & \cdots & \left(0,\dfrac{j-1}{n}\times m,y\right) \\
\vdots & \vdots & \vdots & \vdots & \vdots & \vdots \\
\left(0,\dfrac{m}{n},0\right) & \left(0,\dfrac{m}{n},\dfrac{y}{p}\right) & \cdots & \left(0,\dfrac{m}{n},\dfrac{k-1}{p}\times y\right) & \cdots & \left(0,\dfrac{m}{n},y\right) \\
(0,0,0) & \left(0,0,\dfrac{y}{p}\right) & \cdots & \left(0,0,\dfrac{k-1}{p}\times y\right) & \cdots & (0,0,y)
\end{bmatrix}$$

[0248] 当i＝2时，截面上各网格点组成的矩阵为：

[0249]
$$\begin{bmatrix}
\left(\dfrac{c}{t},m,0\right) & \left(\dfrac{c}{t},m,\dfrac{y}{p}\right) & \cdots & \left(\dfrac{c}{t},m,\dfrac{k-1}{p}\times y\right) & \cdots & \left(\dfrac{c}{t},m,y\right) \\
\vdots & \vdots & \vdots & \vdots & \vdots & \vdots \\
\left(\dfrac{c}{t},\dfrac{j-1}{n}\times m,0\right) & \left(\dfrac{c}{t},\dfrac{j-1}{n}\times m,\dfrac{y}{p}\right) & \cdots & \left(\dfrac{c}{t},\dfrac{j-1}{n}\times m,\dfrac{k-1}{p}\times y\right) & \cdots & \left(\dfrac{c}{t},\dfrac{j-1}{n}\times m,y\right) \\
\vdots & \vdots & \vdots & \vdots & \vdots & \vdots \\
\left(\dfrac{c}{t},\dfrac{m}{n},0\right) & \left(\dfrac{c}{t},\dfrac{m}{n},\dfrac{y}{p}\right) & \cdots & \left(\dfrac{c}{t},\dfrac{m}{n},\dfrac{k-1}{p}\times y\right) & \cdots & \left(\dfrac{c}{t},\dfrac{m}{n},y\right) \\
\left(\dfrac{c}{t},0,0\right) & \left(\dfrac{c}{t},0,\dfrac{y}{p}\right) & \cdots & \left(\dfrac{c}{t},0,\dfrac{k-1}{p}\times y\right) & \cdots & \left(\dfrac{c}{t},0,y\right)
\end{bmatrix}$$

⋯

[0250] 当i＝i时，截面上各网格点组成的矩阵为：

21

[0251]
$$\begin{bmatrix} \left(\dfrac{i-1}{t}\times c,m,0\right) & \left(\dfrac{i-1}{t}\times c,m,\dfrac{y}{p}\right) & \cdots & \left(\dfrac{i-1}{t}\times c,m,\dfrac{k-1}{p}\times y\right) & \cdots & \left(\dfrac{i-1}{t}\times c,m,y\right) \\ \vdots & \vdots & \vdots & \vdots & \vdots & \vdots \\ \left(\dfrac{i-1}{t}\times c,\dfrac{j-1}{n}\times m,0\right) & \left(\dfrac{i-1}{t}\times c,\dfrac{j-1}{n}\times m,\dfrac{y}{p}\right) & \cdots & \left(\dfrac{i-1}{t}\times c,\dfrac{j-1}{n}\times m,\dfrac{k-1}{p}\times y\right) & \cdots & \left(\dfrac{i-1}{t}\times c,\dfrac{j-1}{n}\times m,y\right) \\ \vdots & \vdots & \vdots & \vdots & \vdots & \vdots \\ \left(\dfrac{i-1}{t}\times c,\dfrac{m}{n},0\right) & \left(\dfrac{i-1}{t}\times c,\dfrac{m}{n},\dfrac{y}{p}\right) & \cdots & \left(\dfrac{i-1}{t}\times c,\dfrac{m}{n},\dfrac{k-1}{p}\times y\right) & \cdots & \left(\dfrac{i-1}{t}\times c,\dfrac{m}{n},y\right) \\ \left(\dfrac{i-1}{t}\times c,0,0\right) & \left(\dfrac{i-1}{t}\times c,0,\dfrac{y}{p}\right) & \cdots & \left(\dfrac{i-1}{t}\times c,0,\dfrac{k-1}{p}\times y\right) & \cdots & \left(\dfrac{i-1}{t}\times c,0,y\right) \end{bmatrix}$$

...

[0252]　当i＝t+1时,截面上各网格点组成的矩阵为:

[0253]
$$\begin{bmatrix} (c,m,0) & \left(c,m,\dfrac{y}{p}\right) & \cdots & \left(c,m,\dfrac{k-1}{p}\times y\right) & \cdots & (c,m,y) \\ \vdots & \vdots & \vdots & \vdots & \vdots & \vdots \\ \left(c,\dfrac{j-1}{n}\times m,0\right) & \left(c,\dfrac{j-1}{n}\times m,\dfrac{y}{p}\right) & \cdots & \left(c,\dfrac{j-1}{n}\times m,\dfrac{k-1}{p}\times y\right) & \cdots & \left(c,\dfrac{j-1}{n}\times m,y\right) \\ \vdots & \vdots & \vdots & \vdots & \vdots & \vdots \\ \left(c,\dfrac{m}{n},0\right) & \left(c,\dfrac{m}{n},\dfrac{y}{p}\right) & \cdots & \left(c,\dfrac{m}{n},\dfrac{k-1}{p}\times y\right) & \cdots & \left(c,\dfrac{m}{n},y\right) \\ (c,0,0) & \left(c,0,\dfrac{y}{p}\right) & \cdots & \left(c,0,\dfrac{k-1}{p}\times y\right) & \cdots & (c,0,y) \end{bmatrix}$$

[0254]　(2)在CMY颜色空间中,可得到过$\overline{WM}$段各点、且与$\overline{WM}$垂直的n+1个截面;

[0255]　当j＝1时,截面上各网格点组成的矩阵为:

[0256]
$$\begin{bmatrix} (c,0,0) & \left(c,0,\dfrac{y}{p}\right) & \cdots & \left(c,0,\dfrac{k-1}{p}\times y\right) & \cdots & (c,0,y) \\ \vdots & \vdots & \vdots & \vdots & \vdots & \vdots \\ \left(\dfrac{i-1}{t}\times c,0,0\right) & \left(\dfrac{i-1}{t}\times c,0,\dfrac{y}{p}\right) & \cdots & \left(\dfrac{i-1}{t}\times c,0,\dfrac{k-1}{p}\times y\right) & \cdots & \left(\dfrac{i-1}{t}\times c,0,y\right) \\ \vdots & \vdots & \vdots & \vdots & \vdots & \vdots \\ \left(\dfrac{c}{t},0,0\right) & \left(\dfrac{c}{t},0,\dfrac{y}{p}\right) & \cdots & \left(\dfrac{c}{t},0,\dfrac{k-1}{p}\times y\right) & \cdots & \left(\dfrac{c}{t},0,y\right) \\ (0,0,0) & \left(0,0,\dfrac{y}{p}\right) & \cdots & \left(0,0,\dfrac{k-1}{p}\times y\right) & \cdots & (0,0,y) \end{bmatrix}$$

[0257]　当j＝2时,截面上各网格点组成的矩阵为:

[0258]
$$\begin{bmatrix} \left(c,\dfrac{m}{n},0\right) & \left(c,\dfrac{m}{n},\dfrac{y}{p}\right) & \cdots & \left(c,\dfrac{m}{n},\dfrac{k-1}{p}\times y\right) & \cdots & \left(c,\dfrac{m}{n},y\right) \\ \vdots & \vdots & \vdots & \vdots & \vdots & \vdots \\ \left(\dfrac{i-1}{t}\times c,\dfrac{m}{n},0\right) & \left(\dfrac{i-1}{t}\times c,\dfrac{m}{n},\dfrac{y}{p}\right) & \cdots & \left(\dfrac{i-1}{t}\times c,\dfrac{m}{n},\dfrac{k-1}{p}\times y\right) & \cdots & \left(\dfrac{i-1}{t}\times c,\dfrac{m}{n},y\right) \\ \vdots & \vdots & \vdots & \vdots & \vdots & \vdots \\ \left(\dfrac{c}{t},\dfrac{m}{n},0\right) & \left(\dfrac{c}{t},\dfrac{m}{n},\dfrac{y}{p}\right) & \cdots & \left(\dfrac{c}{t},\dfrac{m}{n},\dfrac{k-1}{p}\times y\right) & \cdots & \left(\dfrac{c}{t},\dfrac{m}{n},y\right) \\ \left(0,\dfrac{m}{n},0\right) & \left(0,\dfrac{m}{n},\dfrac{y}{p}\right) & \cdots & \left(0,\dfrac{m}{n},\dfrac{k-1}{p}\times y\right) & \cdots & \left(0,\dfrac{m}{n},y\right) \end{bmatrix}$$

...

[0259] 当j＝j时，截面上各网格点组成的矩阵为：

[0260]
$$\begin{bmatrix} \left(c,\dfrac{j-1}{n}\times m,0\right) & \left(c,\dfrac{j-1}{n}\times m,\dfrac{y}{p}\right) & \cdots & \left(c,\dfrac{j-1}{n}\times m,\dfrac{k-1}{p}\times y\right) & \cdots & \left(c,\dfrac{j-1}{n}\times m,y\right) \\ \vdots & \vdots & \vdots & \vdots & \vdots & \vdots \\ \left(\dfrac{i-1}{t}\times c,\dfrac{j-1}{n}\times m,0\right) & \left(\dfrac{i-1}{t}\times c,\dfrac{j-1}{n}\times m,\dfrac{y}{p}\right) & \cdots & \left(\dfrac{i-1}{t}\times c,\dfrac{j-1}{n}\times m,\dfrac{k-1}{p}\times y\right) & \cdots & \left(\dfrac{i-1}{t}\times c,\dfrac{j-1}{n}\times m,y\right) \\ \vdots & \vdots & \vdots & \vdots & \vdots & \vdots \\ \left(\dfrac{c}{t},\dfrac{j-1}{n}\times m,0\right) & \left(\dfrac{c}{t},\dfrac{j-1}{n}\times m,\dfrac{y}{p}\right) & \cdots & \left(\dfrac{c}{t},\dfrac{j-1}{n}\times m,\dfrac{k-1}{p}\times y\right) & \cdots & \left(\dfrac{c}{t},\dfrac{j-1}{n}\times m,y\right) \\ \left(0,\dfrac{j-1}{n}\times m,0\right) & \left(0,\dfrac{j-1}{n}\times m,\dfrac{y}{p}\right) & \cdots & \left(0,\dfrac{j-1}{n}\times m,\dfrac{k-1}{p}\times y\right) & \cdots & \left(0,\dfrac{j-1}{n}\times m,y\right) \end{bmatrix}$$

...

[0261] 当j＝n+1时，截面上各网格点组成的矩阵为：

[0262]
$$\begin{bmatrix} \left(c,m,0\right) & \left(c,m,\dfrac{y}{p}\right) & \cdots & \left(c,m,\dfrac{k-1}{p}\times y\right) & \cdots & \left(c,m,y\right) \\ \vdots & \vdots & \vdots & \vdots & \vdots & \vdots \\ \left(\dfrac{i-1}{t}\times c,m,0\right) & \left(\dfrac{i-1}{t}\times c,m,\dfrac{y}{p}\right) & \cdots & \left(\dfrac{i-1}{t}\times c,m,\dfrac{k-1}{p}\times y\right) & \cdots & \left(\dfrac{i-1}{t}\times c,m,y\right) \\ \vdots & \vdots & \vdots & \vdots & \vdots & \vdots \\ \left(\dfrac{c}{t},m,0\right) & \left(\dfrac{c}{t},m,\dfrac{y}{p}\right) & \cdots & \left(\dfrac{c}{t},m,\dfrac{k-1}{p}\times y\right) & \cdots & \left(\dfrac{c}{t},m,y\right) \\ \left(0,m,0\right) & \left(0,m,\dfrac{y}{p}\right) & \cdots & \left(0,m,\dfrac{k-1}{p}\times y\right) & \cdots & \left(0,m,y\right) \end{bmatrix}$$

[0263] （3）在CMY颜色空间中，可得到过$\overline{WY}$段各点、且与$\overline{WY}$垂直的p+1个截面；

[0264] 当k＝1时，截面上各网格点组成的矩阵为：

[0265]

$$\begin{bmatrix} (c,0,0) & \left(c,\dfrac{m}{n},0\right) & \cdots & \left(c,\dfrac{j-1}{n}\times m,0\right) & \cdots & (c,m,0) \\ \vdots & \vdots & \vdots & \vdots & \vdots & \vdots \\ \left(\dfrac{i-1}{t}\times c,0,0\right) & \left(\dfrac{i-1}{t}\times c,\dfrac{m}{n},0\right) & \cdots & \left(\dfrac{i-1}{t}\times c,\dfrac{j-1}{n}\times m,0\right) & \cdots & \left(\dfrac{i-1}{t}\times c,m,0\right) \\ \vdots & \vdots & \vdots & \vdots & \vdots & \vdots \\ \left(\dfrac{c}{t},0,0\right) & \left(\dfrac{c}{t},\dfrac{m}{n},0\right) & \cdots & \left(\dfrac{c}{t},\dfrac{j-1}{n}\times m,0\right) & \cdots & \left(\dfrac{c}{t},m,0\right) \\ (0,0,0) & \left(0,\dfrac{m}{n},0\right) & \cdots & \left(0,\dfrac{j-1}{n}\times m,0\right) & \cdots & (0,m,0) \end{bmatrix}$$

[0266]　当k＝2时,截面上各网格点组成的矩阵为:

[0267]

$$\begin{bmatrix} \left(c,0,\dfrac{y}{p}\right) & \left(c,\dfrac{m}{n},\dfrac{y}{p}\right) & \cdots & \left(c,\dfrac{j-1}{n}\times m,\dfrac{y}{p}\right) & \cdots & \left(c,m,\dfrac{y}{p}\right) \\ \vdots & \vdots & \vdots & \vdots & \vdots & \vdots \\ \left(\dfrac{i-1}{t}\times c,0,\dfrac{y}{p}\right) & \left(\dfrac{i-1}{t}\times c,\dfrac{m}{n},\dfrac{y}{p}\right) & \cdots & \left(\dfrac{i-1}{t}\times c,\dfrac{j-1}{n}\times m,\dfrac{y}{p}\right) & \cdots & \left(\dfrac{i-1}{t}\times c,m,\dfrac{y}{p}\right) \\ \vdots & \vdots & \vdots & \vdots & \vdots & \vdots \\ \left(\dfrac{c}{t},0,\dfrac{y}{p}\right) & \left(\dfrac{c}{t},\dfrac{m}{n},\dfrac{y}{p}\right) & \cdots & \left(\dfrac{c}{t},\dfrac{j-1}{n}\times m,\dfrac{y}{p}\right) & \cdots & \left(\dfrac{c}{t},m,\dfrac{y}{p}\right) \\ \left(0,0,\dfrac{y}{p}\right) & \left(0,\dfrac{m}{n},\dfrac{y}{p}\right) & \cdots & \left(0,\dfrac{j-1}{n}\times m,\dfrac{y}{p}\right) & \cdots & \left(0,m,\dfrac{y}{p}\right) \end{bmatrix}$$

···

[0268]　当k＝k时,截面上各网格点组成的矩阵为:

[0269]

$$\begin{bmatrix} \left(c,0,\dfrac{k-1}{p}\times y\right) & \left(c,\dfrac{m}{n},\dfrac{k-1}{p}\times y\right) & \cdots & \left(c,\dfrac{j-1}{n}\times m,\dfrac{k-1}{p}\times y\right) & \cdots & \left(c,m,\dfrac{k-1}{p}\times y\right) \\ \vdots & \vdots & \vdots & \vdots & \vdots & \vdots \\ \left(\dfrac{i-1}{t}\times c,0,\dfrac{k-1}{p}\times y\right) & \left(\dfrac{i-1}{t}\times c,\dfrac{m}{n},\dfrac{k-1}{p}\times y\right) & \cdots & \left(\dfrac{i-1}{t}\times c,\dfrac{j-1}{n}\times m,\dfrac{k-1}{p}\times y\right) & \cdots & \left(\dfrac{i-1}{t}\times c,m,\dfrac{k-1}{p}\times y\right) \\ \vdots & \vdots & \vdots & \vdots & \vdots & \vdots \\ \left(\dfrac{c}{t},0,\dfrac{k-1}{p}\times y\right) & \left(\dfrac{c}{t},\dfrac{m}{n},\dfrac{k-1}{p}\times y\right) & \cdots & \left(\dfrac{c}{t},\dfrac{j-1}{n}\times m,\dfrac{k-1}{p}\times y\right) & \cdots & \left(\dfrac{c}{t},m,\dfrac{k-1}{p}\times y\right) \\ \left(0,0,\dfrac{k-1}{p}\times y\right) & \left(0,\dfrac{m}{n},\dfrac{k-1}{p}\times y\right) & \cdots & \left(0,\dfrac{j-1}{n}\times m,\dfrac{k-1}{p}\times y\right) & \cdots & \left(0,m,\dfrac{k-1}{p}\times y\right) \end{bmatrix}$$

···

[0270]　当k＝p+1时,截面上各网格点组成的矩阵为:

$$
[0271] \begin{bmatrix}
(c,0,y) & \left(c,\dfrac{m}{n},y\right) & \cdots & \left(c,\dfrac{j-1}{n}\times m,y\right) & \cdots & (c,m,y) \\
\vdots & \vdots & \vdots & \vdots & \vdots & \vdots \\
\left(\dfrac{i-1}{t}\times c,0,y\right) & \left(\dfrac{i-1}{t}\times c,\dfrac{m}{n},y\right) & \cdots & \left(\dfrac{i-1}{t}\times c,\dfrac{j-1}{n}\times m,y\right) & \cdots & \left(\dfrac{i-1}{t}\times c,m,y\right) \\
\vdots & \vdots & \vdots & \vdots & \vdots & \vdots \\
\left(\dfrac{c}{t},0,y\right) & \left(\dfrac{c}{t},\dfrac{m}{n},y\right) & \cdots & \left(\dfrac{c}{t},\dfrac{j-1}{n}\times m,y\right) & \cdots & \left(\dfrac{c}{t},m,y\right) \\
(0,0,y) & \left(0,\dfrac{m}{n},y\right) & \cdots & \left(0,\dfrac{j-1}{n}\times m,y\right) & \cdots & (0,m,y)
\end{bmatrix}
$$

[0272]　实际应用当中, 进一步根据 $\overline{WC}$ 的 t 等分、$\overline{WM}$ 的 n 等分、$\overline{WY}$ 的 p 等分, 则 $\overline{WCBM}$ 面上颜色值模型如下:

[0273]　$\overline{WCBM}(i,j)=\left[\dfrac{i-1}{t}\times c,\dfrac{j-1}{n}\times m,0\right]_{(t+1)\times(n+1)}$;

[0274]　将其展开, 即 (t+1) × (n+1) 维度矩阵如下:

$$
[0275] \begin{bmatrix}
(c,0,0) & \left(c,\dfrac{m}{n},0\right) & \cdots & \left(c,\dfrac{j-1}{n}\times m,0\right) & \cdots & (c,m,0) \\
\vdots & \vdots & \vdots & \vdots & \vdots & \vdots \\
\left(\dfrac{i-1}{t}\times c,0,0\right) & \left(\dfrac{i-1}{t}\times c,\dfrac{m}{n},0\right) & \cdots & \left(\dfrac{i-1}{t}\times c,\dfrac{j-1}{n}\times m,0\right) & \cdots & \left(\dfrac{i-1}{t}\times c,m,0\right) \\
\vdots & \vdots & \vdots & \vdots & \vdots & \vdots \\
\left(\dfrac{c}{t},0,0\right) & \left(\dfrac{c}{t},\dfrac{m}{n},0\right) & \cdots & \left(\dfrac{c}{t},\dfrac{j-1}{n}\times m,0\right) & \cdots & \left(\dfrac{c}{t},m,0\right) \\
(0,0,0) & \left(0,\dfrac{m}{n},0\right) & \cdots & \left(0,\dfrac{j-1}{n}\times m,0\right) & \cdots & (0,m,0)
\end{bmatrix}。
$$

[0276]　$\overline{GKRY}$ 面上颜色值模型如下:

[0277]　$\overline{GKRY}(i,j)=\left[\dfrac{i-1}{t}\times c,\dfrac{j-1}{n}\times m,y\right]_{(t+1)\times(n+1)}$;

[0278]　将其展开, 即 (t+1) × (n+1) 维度矩阵如下:

$$
[0279] \begin{bmatrix}
(c,0,y) & \left(c,\dfrac{m}{n},y\right) & \cdots & \left(c,\dfrac{j-1}{n}\times m,y\right) & \cdots & (c,m,y) \\
\vdots & \vdots & \vdots & \vdots & \vdots & \vdots \\
\left(\dfrac{i-1}{t}\times c,0,y\right) & \left(\dfrac{i-1}{t}\times c,\dfrac{m}{n},y\right) & \cdots & \left(\dfrac{i-1}{t}\times c,\dfrac{j-1}{n}\times m,y\right) & \cdots & \left(\dfrac{i-1}{t}\times c,m,y\right) \\
\vdots & \vdots & \vdots & \vdots & \vdots & \vdots \\
\left(\dfrac{c}{t},0,y\right) & \left(\dfrac{c}{t},\dfrac{m}{n},y\right) & \cdots & \left(\dfrac{c}{t},\dfrac{j-1}{n}\times m,y\right) & \cdots & \left(\dfrac{c}{t},m,y\right) \\
(0,0,y) & \left(0,\dfrac{m}{n},y\right) & \cdots & \left(0,\dfrac{j-1}{n}\times m,y\right) & \cdots & (0,m,y)
\end{bmatrix}。
$$

[0280] $\overline{WCGY}$ 面上颜色值模型如下:

[0281] $\overline{WCGY}(i,k) = \left[\dfrac{i-1}{t} \times c, 0, \dfrac{k-1}{p} \times y \right]_{(t+1)\times(p+1)}$;

[0282] 将其展开,即 (t+1) × (p+1) 维度矩阵如下:

[0283]
$$\begin{bmatrix}
(c,0,0) & \left(c,0,\dfrac{y}{p}\right) & \cdots & \left(c,0,\dfrac{k-1}{p}\times y\right) & \cdots & (c,0,y) \\
\vdots & \vdots & \vdots & \vdots & \vdots & \vdots \\
\left(\dfrac{i-1}{t}\times c,0,0\right) & \left(\dfrac{i-1}{t}\times c,0,\dfrac{y}{p}\right) & \cdots & \left(\dfrac{i-1}{t}\times c,0,\dfrac{k-1}{p}\times y\right) & \cdots & \left(\dfrac{i-1}{t}\times c,0,y\right) \\
\vdots & \vdots & \vdots & \vdots & \vdots & \vdots \\
\left(\dfrac{c}{t},0,0\right) & \left(\dfrac{c}{t},0,\dfrac{y}{p}\right) & \cdots & \left(\dfrac{c}{t},0,\dfrac{k-1}{p}\times y\right) & \cdots & \left(\dfrac{c}{t},0,y\right) \\
(0,0,0) & \left(0,0,\dfrac{y}{p}\right) & \cdots & \left(0,0,\dfrac{k-1}{p}\times y\right) & \cdots & (0,0,y)
\end{bmatrix}_{\circ}$$

[0284] $\overline{MBKR}$ 面上颜色值模型如下:

[0285] $\overline{MBKR}(i,k) = \left[\dfrac{i-1}{t} \times c, m, \dfrac{k-1}{p} \times y \right]_{(t+1)\times(p+1)}$;

[0286] 将其展开,即 (t+1) × (p+1) 维度矩阵如下:

[0287]
$$\begin{bmatrix}
(c,m,0) & \left(c,m,\dfrac{y}{p}\right) & \cdots & \left(c,m,\dfrac{k-1}{p}\times y\right) & \cdots & (c,m,y) \\
\vdots & \vdots & \vdots & \vdots & \vdots & \vdots \\
\left(\dfrac{i-1}{t}\times c,m,0\right) & \left(\dfrac{i-1}{t}\times c,m,\dfrac{y}{p}\right) & \cdots & \left(\dfrac{i-1}{t}\times c,m,\dfrac{k-1}{p}\times y\right) & \cdots & \left(\dfrac{i-1}{t}\times c,m,y\right) \\
\vdots & \vdots & \vdots & \vdots & \vdots & \vdots \\
\left(\dfrac{c}{t},m,0\right) & \left(\dfrac{c}{t},m,\dfrac{y}{p}\right) & \cdots & \left(\dfrac{c}{t},m,\dfrac{k-1}{p}\times y\right) & \cdots & \left(\dfrac{c}{t},m,y\right) \\
(0,m,0) & \left(0,m,\dfrac{y}{p}\right) & \cdots & \left(0,m,\dfrac{k-1}{p}\times y\right) & \cdots & (0,m,y)
\end{bmatrix}_{\circ}$$

[0288] $\overline{WMRY}$ 面上颜色值模型如下:

[0289] $\overline{WMRY}(j,k) = \left[0, \dfrac{j-1}{n} \times m, \dfrac{k-1}{p} \times y \right]_{(n+1)\times(p+1)}$;

[0290] 将其展开,即 (n+1) × (p+1) 维度矩阵如下:

[0291]
$$\begin{bmatrix} (0,m,0) & \left(0,m,\dfrac{y}{p}\right) & \cdots & \left(0,m,\dfrac{k-1}{p}\times y\right) & \cdots & (0,m,y) \\ \vdots & \vdots & \cdots & \vdots & \cdots & \vdots \\ \left(0,\dfrac{j-1}{n}\times m,0\right) & \left(0,\dfrac{j-1}{n}\times m,\dfrac{y}{p}\right) & \cdots & \left(0,\dfrac{j-1}{n}\times m,\dfrac{k-1}{p}\times y\right) & \cdots & \left(0,\dfrac{j-1}{n}\times m,y\right) \\ \vdots & \vdots & \cdots & \vdots & \cdots & \vdots \\ \left(0,\dfrac{m}{n},0\right) & \left(0,\dfrac{m}{n},\dfrac{y}{p}\right) & \cdots & \left(0,\dfrac{m}{n},\dfrac{k-1}{p}\times y\right) & \cdots & \left(0,\dfrac{m}{n},y\right) \\ (0,0,0) & \left(0,0,\dfrac{y}{p}\right) & \cdots & \left(0,0,\dfrac{k-1}{p}\times y\right) & \cdots & (0,0,y) \end{bmatrix}。$$

[0292]　$\overline{CBKG}$ 面上颜色值模型如下：

[0293]　$\overline{GBKG}(j,k)=\left[c,\dfrac{j-1}{n}\times m,\dfrac{k-1}{p}\times y\right]_{(n+1)\times(p+1)}$；

[0294]　将其展开，即 (n+1)×(p+1) 维度矩阵如下：

[0295]
$$\begin{bmatrix} (c,m,0) & \left(c,m,\dfrac{y}{p}\right) & \cdots & \left(c,m,\dfrac{k-1}{p}\times y\right) & \cdots & (c,m,y) \\ \vdots & \vdots & \cdots & \vdots & \cdots & \vdots \\ \left(c,\dfrac{j-1}{n}\times m,0\right) & \left(c,\dfrac{j-1}{n}\times m,\dfrac{y}{p}\right) & \cdots & \left(c,\dfrac{j-1}{n}\times m,\dfrac{k-1}{p}\times y\right) & \cdots & \left(c,\dfrac{j-1}{n}\times m,y\right) \\ \vdots & \vdots & \cdots & \vdots & \cdots & \vdots \\ \left(c,\dfrac{m}{n},0\right) & \left(c,\dfrac{m}{n},\dfrac{y}{p}\right) & \cdots & \left(c,\dfrac{m}{n},\dfrac{k-1}{p}\times y\right) & \cdots & \left(c,\dfrac{m}{n},y\right) \\ (c,0,0) & \left(c,0,\dfrac{y}{p}\right) & \cdots & \left(c,0,\dfrac{k-1}{p}\times y\right) & \cdots & (c,0,y) \end{bmatrix}。$$

[0296]　实际应用当中，基于CMY颜色空间所对应立方体空间中任意点的颜色值模型如下：

[0297]　$\left(\dfrac{i-1}{t}\times c,\dfrac{j-1}{n}\times m,\dfrac{k-1}{p}\times y\right)$

[0298]　与上述相对应，本发明进一步设计了一种针对网格化CMY颜色空间的网格点阵列模型构建方法的应用，将所述CMY颜色空间网格点阵列模型获得CMY颜色空间网格点颜色，存储于数据库中，按如下方式，用于实现对目标颜色的分析；

[0299]　首选采用检色仪检测获得目标颜色所对应的CMY颜色检测数据，并在数据库中查找该CMY颜色检测数据所对应的网格点；然后在以该网格点为原点、周围预设半径范围，通过比对的方式，获得目标颜色所对应的网格点；最后由该网格点所对应的CMY颜色数据，构成目标颜色所对应的CMY颜色数据。

[0300]　基于上述所设计网格化CMY颜色空间的网格点阵列模型构建方法，在具体的实际应用当中，如图3所示。

[0301]　（一）基于n＝10，实现CMY颜色空间正六面体棱线的可视化，具体数据如下表1所示。

[0302]　表1

RGB 值	1	2	3	4	5	6	7	8	9	10	11
$\overline{WY}$	255,255,255	255,255,230	255,255,204	255,255,179	255,255,153	255,255,128	255,255,102	255,255,77	255,255,51	255,255,26	255,255,0
$\overline{WM}$	255,255,255	255,230,255	255,204,255	255,179,255	255,153,255	255,128,255	255,102,255	255,77,255	255,51,255	255,26,255	255,0,255
$\overline{WC}$	255,255,255	230,255,255	204,255,255	179,255,255	153,255,255	128,255,255	102,255,255	77,255,255	51,255,255	26,255,255	0,255,255
$\overline{CB}$	0,255,255	0,230,255	0,204,255	0,179,255	0,153,255	0,128,255	0,102,255	0,77,255	0,51,255	0,26,255	0,0,255
$\overline{MB}$	255,0,255	230,0,255	204,0,255	179,0,255	153,0,255	128,0,255	102,0,255	77,0,255	51,0,255	26,0,255	0,0,255
$\overline{CG}$	0,255,255	0,255,230	0,255,204	0,255,179	0,255,153	0,255,128	0,255,102	0,255,77	0,255,51	0,255,26	0,255,0
$\overline{YG}$	255,255,0	230,255,0	204,255,0	179,255,0	153,255,0	128,255,0	102,255,0	77,255,0	51,255,0	26,255,0	0,255,0
$\overline{YR}$	255,255,0	255,230,0	255,204,0	255,179,0	255,153,0	255,128,0	255,102,0	255,77,0	255,51,0	255,26,0	255,0,0
$\overline{MR}$	255,0,255	255,0,230	255,0,204	255,0,179	255,0,153	255,0,128	255,0,102	255,0,77	255,0,51	255,0,26	255,0,0
$\overline{BK}$	0,0,255	0,0,230	0,0,204	0,0,179	0,0,153	0,0,128	0,0,102	0,0,77	0,0,51	0,0,26	0,0,0
$\overline{RK}$	0,255,0	0,230,0	0,204,0	0,179,0	0,153,0	0,128,0	0,102,0	0,77,0	0,51,0	0,26,0	0,0,0
$\overline{GK}$	255,0,0	230,0,0	204,0,0	179,0,0	153,0,0	128,0,0	102,0,0	77,0,0	51,0,0	26,0,0	0,0,0

CMY颜色空间正六面体的面对角线的可视化,如下表2所示。

[0304]　表2

RGB 值	1	2	3	4	5	6	7	8	9	10	11
$\overline{MC}$	255,0,255	230,26,255	204,51,255	179,77,255	153,102,255	128,128,255	102,153,255	77,179,255	51,204,255	26,230,255	0,255,255
$\overline{WB}$	255,255,255	230,230,255	204,204,255	179,179,255	153,153,255	128,128,255	102,102,255	77,77,255	51,51,255	26,26,255	0,0,255
$\overline{CY}$	0,255,255	26,255,230	51,255,204	77,255,179	102,255,153	128,255,128	153,255,102	179,255,77	204,255,51	230,255,26	255,255,0
$\overline{WG}$	255,255,255	230,255,230	204,255,204	179,255,179	153,255,153	128,255,128	102,255,102	77,255,77	51,255,51	26,255,26	0,255,0
$\overline{YM}$	255,255,0	255,230,26	255,204,51	255,179,77	255,153,102	255,128,128	255,102,153	255,77,179	255,51,204	255,26,230	255,0,255
$\overline{WR}$	255,255,255	255,230,230	255,204,204	255,179,179	255,153,153	255,128,128	255,102,102	255,77,77	255,51,51	255,26,26	255,0,0
$\overline{RB}$	255,0,0	230,0,26	204,0,51	179,0,77	153,0,102	128,0,128	102,0,153	77,0,179	51,0,204	26,0,230	0,0,255
$\overline{YK}$	255,255,0	230,230,0	204,204,0	179,179,0	153,153,0	128,128,0	102,102,0	77,77,0	51,51,0	26,26,0	0,0,0
$\overline{BG}$	0,0,255	0,26,230	0,51,204	0,77,179	0,102,153	0,128,128	0,153,102	0,179,77	0,204,51	0,230,26	0,255,0
$\overline{CK}$	0,255,255	0,230,230	0,204,204	0,179,179	0,153,153	0,128,128	0,102,102	0,77,77	0,51,51	0,26,26	0,0,0
$\overline{GR}$	0,255,0	26,230,0	51,204,0	77,179,0	102,153,0	128,128,0	153,102,0	179,77,0	204,51,0	230,26,0	255,0,0
$\overline{MK}$	255,0,255	230,0,230	204,0,204	179,0,179	153,0,153	128,0,128	102,0,102	77,0,77	51,0,51	26,0,26	0,0,0

[0306]　CMY颜色空间正六面体体对角线的可视化,如下表3所示。

[0307]　表3

RGB 值	1(12)	2(13)	3(14)	4(15)	5(16)	6(17)	7(18)	8(19)	9(20)	10(21)	11
$\overline{WK}$	255,255,255	230,230,230	204,204,204	179,179,179	153,153,153	128,128,128	102,102,102	77,77,77	51,51,51	26,26,26	0,0,0
$\overline{CR}$	0,255,255	26,230,230	51,204,204	77,179,179	102,153,153	128,128,128	153,102,102	179,77,77	204,51,51	230,26,26	255,0,0
$\overline{MG}$	255,0,255	230,26,230	204,51,204	179,77,179	153,102,153	128,128,128	102,153,102	77,179,77	51,204,51	26,230,26	0,255,0
$\overline{YB}$	255,255,0	230,230,26	204,204,51	179,179,77	153,153,102	128,128,128	102,102,153	77,77,179	51,51,204	26,26,230	0,0,255

[0310]　(二)基于t、n、p均等于10,CMY颜色空间正六面体外表面的可视化,如下表4所示。

[0311]　表4

$\overline{GCBK}$	1	2	3	4	5	6	7	8	9	10	11
1	0,255,0	0,230,0	0,204,0	0,179,0	0,153,0	0,128,0	0,102,0	0,77,0	0,51,0	0,26,0	0,0,0
2	0,255,26	0,230,26	0,204,26	0,179,26	0,153,26	0,128,26	0,102,26	0,77,26	0,51,26	0,26,26	0,0,26
3	0,255,51	0,230,51	0,204,51	0,179,51	0,153,51	0,128,51	0,102,51	0,77,51	0,51,51	0,26,51	0,0,51
4	0,255,77	0,230,77	0,204,77	0,179,77	0,153,77	0,128,77	0,102,77	0,77,77	0,51,77	0,26,77	0,0,77
5	0,255,102	0,230,102	0,204,102	0,179,102	0,153,102	0,128,102	0,102,102	0,77,102	0,51,102	0,26,102	0,0,102
6	0,255,128	0,230,128	0,204,128	0,179,128	0,153,128	0,128,128	0,102,128	0,77,128	0,51,128	0,26,128	0,0,128
7	0,255,153	0,230,153	0,204,153	0,179,153	0,153,153	0,128,153	0,102,153	0,77,153	0,51,153	0,26,153	0,0,153
8	0,255,179	0,230,179	0,204,179	0,179,179	0,153,179	0,128,179	0,102,179	0,77,179	0,51,179	0,26,179	0,0,179
9	0,255,204	0,230,204	0,204,204	0,179,204	0,153,204	0,128,204	0,102,204	0,77,204	0,51,204	0,26,204	0,0,204
10	0,255,230	0,230,230	0,204,230	0,179,230	0,153,230	0,128,230	0,102,230	0,77,230	0,51,230	0,26,230	0,0,230
11	0,255,255	0,230,255	0,204,255	0,179,255	0,153,255	0,128,255	0,102,255	0,77,255	0,51,255	0,26,255	0,0,255

[0313] CMY颜色空间正六面体外表面的可视化，如下表5所示。

[0314] 表5

$\overline{YMWR}$	1	2	3	4	5	6	7	8	9	10	11
1	255,255,0	255,230,0	255,204,0	255,179,0	255,153,0	255,128,0	255,102,0	255,77,0	255,51,0	255,26,0	255,0,0
2	255,255,26	255,230,26	255,204,26	255,179,26	255,153,26	255,128,26	255,102,26	255,77,26	255,51,26	255,26,26	255,0,26
3	255,255,51	255,230,51	255,204,51	255,179,51	255,153,51	255,128,51	255,102,51	255,77,51	255,51,51	255,26,51	255,0,51
4	255,255,77	255,230,77	255,204,77	255,179,77	255,153,77	255,128,77	255,102,77	255,77,77	255,51,77	255,26,77	255,0,77
5	255,255,102	255,230,102	255,204,102	255,179,102	255,153,102	255,128,102	255,102,102	255,77,102	255,51,102	255,26,102	255,0,102
6	255,255,128	255,230,128	255,204,128	255,179,128	255,153,128	255,128,128	255,102,128	255,77,128	255,51,128	255,26,128	255,0,128
7	255,255,153	255,230,153	255,204,153	255,179,153	255,153,153	255,128,153	255,102,153	255,77,153	255,51,153	255,26,153	255,0,153
8	255,255,179	255,230,179	255,204,179	255,179,179	255,153,179	255,128,179	255,102,179	255,77,179	255,51,179	255,26,179	255,0,179
9	255,255,204	255,230,204	255,204,204	255,179,204	255,153,204	255,128,204	255,102,204	255,77,204	255,51,204	255,26,204	255,0,204
10	255,255,230	255,230,230	255,204,230	255,179,230	255,153,230	255,128,230	255,102,230	255,77,230	255,51,230	255,26,230	255,0,230
11	255,255,255	255,230,255	255,204,255	255,179,255	255,153,255	255,128,255	255,102,255	255,77,255	255,51,255	255,26,255	255,0,255

[0316] CMY颜色空间正六面体外表面的可视化，如下表6所示。

[0317] 表6

$\overline{GCWY}$	1	2	3	4	5	6	7	8	9	10	11
1	0,255,0	26,255,0	51,255,0	77,255,0	102,255,0	128,255,0	153,255,0	179,255,0	204,255,0	230,255,0	255,255,0
2	0,255,26	26,255,26	51,255,26	77,255,26	102,255,26	128,255,26	153,255,26	179,255,26	204,255,26	230,255,26	255,255,26
3	0,255,51	26,255,51	51,255,51	77,255,51	102,255,51	128,255,51	153,255,51	179,255,51	204,255,51	230,255,51	255,255,51
4	0,255,77	26,255,77	51,255,77	77,255,77	102,255,77	128,255,77	153,255,77	179,255,77	204,255,77	230,255,77	255,255,77
5	0,255,102	26,255,102	51,255,102	77,255,102	102,255,102	128,255,102	153,255,102	179,255,102	204,255,102	230,255,102	255,255,102
6	0,255,128	26,255,128	51,255,128	77,255,128	102,255,128	128,255,128	153,255,128	179,255,128	204,255,128	230,255,128	255,255,128
7	0,255,153	26,255,153	51,255,153	77,255,153	102,255,153	128,255,153	153,255,153	179,255,153	204,255,153	230,255,153	255,255,153
8	0,255,179	26,255,179	51,255,179	77,255,179	102,255,179	128,255,179	153,255,179	179,255,179	204,255,179	230,255,179	255,255,179
9	0,255,204	26,255,204	51,255,204	77,255,204	102,255,204	128,255,204	153,255,204	179,255,204	204,255,204	230,255,204	255,255,204
10	0,255,230	26,255,230	51,255,230	77,255,230	102,255,230	128,255,230	153,255,230	179,255,230	204,255,230	230,255,230	255,255,230
11	0,255,255	26,255,255	51,255,255	77,255,255	102,255,255	128,255,255	153,255,255	179,255,255	204,255,255	230,255,255	255,255,255

[0320] CMY颜色空间正六面体外表面的可视化，如下表7所示。

[0321] 表7

29

[0322]

$\overline{KBMR}$	1	2	3	4	5	6	7	8	9	10	11
1	0,0,0	26,0,0	51,0,0	77,0,0	102,0,0	128,0,0	153,0,0	179,0,0	204,0,0	230,0,0	255,0,0
2	0,0,26	26,0,26	51,0,26	77,0,26	102,0,26	128,0,26	153,0,26	179,0,26	204,0,26	230,0,26	255,0,26
3	0,0,51	26,0,51	51,0,51	77,0,51	102,0,51	128,0,51	153,0,51	179,0,51	204,0,51	230,0,51	255,0,51
4	0,0,77	26,0,77	51,0,77	77,0,77	102,0,77	128,0,77	153,0,77	179,0,77	204,0,77	230,0,77	255,0,77
5	0,0,102	26,0,102	51,0,102	77,0,102	102,0,102	128,0,102	153,0,102	179,0,102	204,0,102	230,0,102	255,0,102
6	0,0,128	26,0,128	51,0,128	77,0,128	102,0,128	128,0,128	153,0,128	179,0,128	204,0,128	230,0,128	255,0,128
7	0,0,153	26,0,153	51,0,153	77,0,153	102,0,153	128,0,153	153,0,153	179,0,153	204,0,153	230,0,153	255,0,153
8	0,0,179	26,0,179	51,0,179	77,0,179	102,0,179	128,0,179	153,0,179	179,0,179	204,0,179	230,0,179	255,0,179
9	0,0,204	26,0,204	51,0,204	77,0,204	102,0,204	128,0,204	153,0,204	179,0,204	204,0,204	230,0,204	255,0,204
10	0,0,230	26,0,230	51,0,230	77,0,230	102,0,230	128,0,230	153,0,230	179,0,230	204,0,230	230,0,230	255,0,230
11	0,0,255	26,0,255	51,0,255	77,0,255	102,0,255	128,0,255	153,0,255	179,0,255	204,0,255	230,0,255	255,0,255

[0323]　　CMY颜色空间正六面体外表面的可视化,如下表8所示。

[0324]　　表8

[0325]

$\overline{YGKR}$	1	2	3	4	5	6	7	8	9	10	11
1	255,255,0	255,230,0	255,204,0	255,179,0	255,153,0	255,128,0	255,102,0	255,77,0	255,51,0	255,26,0	255,0,0
2	230,255,0	230,230,0	230,204,0	230,179,0	230,153,0	230,128,0	230,102,0	230,77,0	230,51,0	230,26,0	230,0,0
3	204,255,0	204,230,0	204,204,0	204,179,0	204,153,0	204,128,0	204,102,0	204,77,0	204,51,0	204,26,0	204,0,0
4	179,255,0	179,230,0	179,204,0	179,179,0	179,153,0	179,128,0	179,102,0	179,77,0	179,51,0	179,26,0	179,0,0
5	153,255,0	153,230,0	153,204,0	153,179,0	153,153,0	153,128,0	153,102,0	153,77,0	153,51,0	153,26,0	153,0,0
6	128,255,0	128,230,0	128,204,0	128,179,0	128,153,0	128,128,0	128,102,0	128,77,0	128,51,0	128,26,0	128,0,0
7	102,255,0	102,230,0	102,204,0	102,179,0	102,153,0	102,128,0	102,102,0	102,77,0	102,51,0	102,26,0	102,0,0
8	77,255,0	77,230,0	77,204,0	77,179,0	77,153,0	77,128,0	77,102,0	77,77,0	77,51,0	77,26,0	77,0,0
9	51,255,0	51,230,0	51,204,0	51,179,0	51,153,0	51,128,0	51,102,0	51,77,0	51,51,0	51,26,0	51,0,0
10	26,255,0	26,230,0	26,204,0	26,179,0	26,153,0	26,128,0	26,102,0	26,77,0	26,51,0	26,26,0	26,0,0
11	0,255,0	0,230,0	0,204,0	0,179,0	0,153,0	0,128,0	0,102,0	0,77,0	0,51,0	0,26,0	0,0,0

[0326]　　CMY颜色空间正六面体外表面的可视化,如下表9所示。

[0327]　　表9

[0328]
[0329]

$\overline{WCBM}$	1	2	3	4	5	6	7	8	9	10	11
1	255,255,255	255,230,255	255,204,255	255,179,255	255,153,255	255,128,255	255,102,255	255,77,255	255,51,255	255,26,255	255,0,255
2	230,255,255	230,230,255	230,204,255	230,179,255	230,153,255	230,128,255	230,102,255	230,77,255	230,51,255	230,26,255	230,0,255
3	204,255,255	204,230,255	204,204,255	204,179,255	204,153,255	204,128,255	204,102,255	204,77,255	204,51,255	204,26,255	204,0,255
4	179,255,255	179,230,255	179,204,255	179,179,255	179,153,255	179,128,255	179,102,255	179,77,255	179,51,255	179,26,255	179,0,255
5	153,255,255	153,230,255	153,204,255	153,179,255	153,153,255	153,128,255	153,102,255	153,77,255	153,51,255	153,26,255	153,0,255
6	128,255,255	128,230,255	128,204,255	128,179,255	128,153,255	128,128,255	128,102,255	128,77,255	128,51,255	128,26,255	128,0,255
7	102,255,255	102,230,255	102,204,255	102,179,255	102,153,255	102,128,255	102,102,255	102,77,255	102,51,255	102,26,255	102,0,255
8	77,255,255	77,230,255	77,204,255	77,179,255	77,153,255	77,128,255	77,102,255	77,77,255	77,51,255	77,26,255	77,0,255
9	51,255,255	51,230,255	51,204,255	51,179,255	51,153,255	51,128,255	51,102,255	51,77,255	51,51,255	51,26,255	51,0,255
10	26,255,255	26,230,255	26,204,255	26,179,255	26,153,255	26,128,255	26,102,255	26,77,255	26,51,255	26,26,255	26,0,255
11	0,255,255	0,230,255	0,204,255	0,179,255	0,153,255	0,128,255	0,102,255	0,77,255	0,51,255	0,26,255	0,0,255

[0330]　　CMY颜色空间正六面体内截面的可视化

[0331]　　　(1)在CMY颜色空间中,可得到过$\overline{WC}$段各点、且与$\overline{WC}$垂直的11个截面,CMY颜色空间正六面体内截面的可视化,如下表10所示。

[0332]　表10

[0333]

t＝1	1	2	3	4	5	6	7	8	9	10	11
1	255,255,0	255,230,0	255,204,0	255,179,0	255,153,0	255,128,0	255,102,0	255,77,0	255,51,0	255,26,0	255,0,0
2	255,255,26	255,230,26	255,204,26	255,179,26	255,153,26	255,128,26	255,102,26	255,77,26	255,51,26	255,26,26	255,0,26
3	255,255,51	255,230,51	255,204,51	255,179,51	255,153,51	255,128,51	255,102,51	255,77,51	255,51,51	255,26,51	255,0,51
4	255,255,77	255,230,77	255,204,77	255,179,77	255,153,77	255,128,77	255,102,77	255,77,77	255,51,77	255,26,77	255,0,77
5	255,255,102	255,230,102	255,204,102	255,179,102	255,153,102	255,128,102	255,102,102	255,77,102	255,51,102	255,26,102	255,0,102
6	255,255,128	255,230,128	255,204,128	255,179,128	255,153,128	255,128,128	255,102,128	255,77,128	255,51,128	255,26,128	255,0,128
7	255,255,153	255,230,153	255,204,153	255,179,153	255,153,153	255,128,153	255,102,153	255,77,153	255,51,153	255,26,153	255,0,153
8	255,255,179	255,230,179	255,204,179	255,179,179	255,153,179	255,128,179	255,102,179	255,77,179	255,51,179	255,26,179	255,0,179
9	255,255,204	255,230,204	255,204,204	255,179,204	255,153,204	255,128,204	255,102,204	255,77,204	255,51,204	255,26,204	255,0,204
10	255,255,230	255,230,230	255,204,230	255,179,230	255,153,230	255,128,230	255,102,230	255,77,230	255,51,230	255,26,230	255,0,230
11	255,255,255	255,230,255	255,204,255	255,179,255	255,153,255	255,128,255	255,102,255	255,77,255	255,51,255	255,26,255	255,0,255

[0334]　CMY颜色空间正六面体内截面的可视化,如下表11所示。

[0335]　表11

[0336]

t＝2	1	2	3	4	5	6	7	8	9	10	11
1	230,255,0	230,230,0	230,204,0	230,179,0	230,153,0	230,128,0	230,102,0	230,77,0	230,51,0	230,26,0	230,0,0
2	230,255,26	230,230,26	230,204,26	230,179,26	230,153,26	230,128,26	230,102,26	230,77,26	230,51,26	230,26,26	230,0,26

	1	2	3	4	5	6	7	8	9	10	11
3	230,255,51	230,230,51	230,204,51	230,179,51	230,153,51	230,128,51	230,102,51	230,77,51	230,51,51	230,26,51	230,0,51
4	230,255,77	230,230,77	230,204,77	230,179,77	230,153,77	230,128,77	230,102,77	230,77,77	230,51,77	230,26,77	230,0,77
5	230,255,102	230,230,102	230,204,102	230,179,102	230,153,102	230,128,102	230,102,102	230,77,102	230,51,102	230,26,102	230,0,102
6	230,255,128	230,230,128	230,204,128	230,179,128	230,153,128	230,128,128	230,102,128	230,77,128	230,51,128	230,26,128	230,0,128
7	230,255,153	230,230,153	230,204,153	230,179,153	230,153,153	230,128,153	230,102,153	230,77,153	230,51,153	230,26,153	230,0,153
8	230,255,179	230,230,179	230,204,179	230,179,179	230,153,179	230,128,179	230,102,179	230,77,179	230,51,179	230,26,179	230,0,179
9	230,255,204	230,230,204	230,204,204	230,179,204	230,153,204	230,128,204	230,102,204	230,77,204	230,51,204	230,26,204	230,0,204
10	230,255,230	230,230,230	230,204,230	230,179,230	230,153,230	230,128,230	230,102,230	230,77,230	230,51,230	230,26,230	230,0,230
11	230,255,255	230,230,255	230,204,255	230,179,255	230,153,255	230,128,255	230,102,255	230,77,255	230,51,255	230,26,255	230,0,255

[0337]　CMY颜色空间正六面体内截面的可视化,如下表12所示。

[0338]　表12

t=3	1	2	3	4	5	6	7	8	9	10	11
1	204,255,0	204,230,0	204,204,0	204,179,0	204,153,0	204,128,0	204,102,0	204,77,0	204,51,0	204,26,0	204,0,0
2	204,255,26	204,230,26	204,204,26	204,179,26	204,153,26	204,128,26	204,102,26	204,77,26	204,51,26	204,26,26	204,0,26
3	204,255,51	204,230,51	204,204,51	204,179,51	204,153,51	204,128,51	204,102,51	204,77,51	204,51,51	204,26,51	204,0,51
4	204,255,77	204,230,77	204,204,77	204,179,77	204,153,77	204,128,77	204,102,77	204,77,77	204,51,77	204,26,77	204,0,77
5	204,255,102	204,230,102	204,204,102	204,179,102	204,153,102	204,128,102	204,102,102	204,77,102	204,51,102	204,26,102	204,0,102
6	204,255,128	204,230,128	204,204,128	204,179,128	204,153,128	204,128,128	204,102,128	204,77,128	204,51,128	204,26,128	204,0,128
7	204,255,153	204,230,153	204,204,153	204,179,153	204,153,153	204,128,153	204,102,153	204,77,153	204,51,153	204,26,153	204,0,153
8	204,255,179	204,230,179	204,204,179	204,179,179	204,153,179	204,128,179	204,102,179	204,77,179	204,51,179	204,26,179	204,0,179
9	204,255,204	204,230,204	204,204,204	204,179,204	204,153,204	204,128,204	204,102,204	204,77,204	204,51,204	204,26,204	204,0,204
10	204,255,230	204,230,230	204,204,230	204,179,230	204,153,230	204,128,230	204,102,230	204,77,230	204,51,230	204,26,230	204,0,230
11	204,255,255	204,230,255	204,204,255	204,179,255	204,153,255	204,128,255	204,102,255	204,77,255	204,51,255	204,26,255	204,0,255

[0341]　CMY颜色空间正六面体内截面的可视化,如下表13所示。

[0342]　表13

t=4	1	2	3	4	5	6	7	8	9	10	11
1	179,255,0	179,230,0	179,204,0	179,179,0	179,153,0	179,128,0	179,102,0	179,77,0	179,51,0	179,26,0	179,0,0

	1	2	3	4	5	6	7	8	9	10	11
2	179,255,26	179,230,26	179,204,26	179,179,26	179,153,26	179,128,26	179,102,26	179,77,26	179,51,26	179,26,26	179,0,26
3	179,255,51	179,230,51	179,204,51	179,179,51	179,153,51	179,128,51	179,102,51	179,77,51	179,51,51	179,26,51	179,0,51
4	179,255,77	179,230,77	179,204,77	179,179,77	179,153,77	179,128,77	179,102,77	179,77,77	179,51,77	179,26,77	179,0,77
5	179,255,102	179,230,102	179,204,102	179,179,102	179,153,102	179,128,102	179,102,102	179,77,102	179,51,102	179,26,102	179,0,102
6	179,255,128	179,230,128	179,204,128	179,179,128	179,153,128	179,128,128	179,102,128	179,77,128	179,51,128	179,26,128	179,0,128
7	179,255,153	179,230,153	179,204,153	179,179,153	179,153,153	179,128,153	179,102,153	179,77,153	179,51,153	179,26,153	179,0,153
8	179,255,179	179,230,179	179,204,179	179,179,179	179,153,179	179,128,179	179,102,179	179,77,179	179,51,179	179,26,179	179,0,179
9	179,255,204	179,230,204	179,204,204	179,179,204	179,153,204	179,128,204	179,102,204	179,77,204	179,51,204	179,26,204	179,0,204
10	179,255,230	179,230,230	179,204,230	179,179,230	179,153,230	179,128,230	179,102,230	179,77,230	179,51,230	179,26,230	179,0,230
11	179,255,255	179,230,255	179,204,255	179,179,255	179,153,255	179,128,255	179,102,255	179,77,255	179,51,255	179,26,255	179,0,255

[0344] CMY颜色空间正六面体内截面的可视化,如下表14所示。

[0345] 表14

[0346]

t＝5	1	2	3	4	5	6	7	8	9	10	11
1	153,255,0	153,230,0	153,204,0	153,179,0	153,153,0	153,128,0	153,102,0	153,77,0	153,51,0	153,26,0	153,0,0
2	153,255,26	153,230,26	153,204,26	153,179,26	153,153,26	153,128,26	153,102,26	153,77,26	153,51,26	153,26,26	153,0,26
3	153,255,51	153,230,51	153,204,51	153,179,51	153,153,51	153,128,51	153,102,51	153,77,51	153,51,51	153,26,51	153,0,51
4	153,255,77	153,230,77	153,204,77	153,179,77	153,153,77	153,128,77	153,102,77	153,77,77	153,51,77	153,26,77	153,0,77
5	153,255,102	153,230,102	153,204,102	153,179,102	153,153,102	153,128,102	153,102,102	153,77,102	153,51,102	153,26,102	153,0,102
6	153,255,128	153,230,128	153,204,128	153,179,128	153,153,128	153,128,128	153,102,128	153,77,128	153,51,128	153,26,128	153,0,128

7	153,255,153	153,230,153	153,204,153	153,179,153	153,153,153	153,128,153	153,102,153	153,77,153	153,51,153	153,26,153	153,0,153
8	153,255,179	153,230,179	153,204,179	153,179,179	153,153,179	153,128,179	153,102,179	153,77,179	153,51,179	153,26,179	153,0,179
9	153,255,204	153,230,204	153,204,204	153,179,204	153,153,204	153,128,204	153,102,204	153,77,204	153,51,204	153,26,204	153,0,204
10	153,255,230	153,230,230	153,204,230	153,179,230	153,153,230	153,128,230	153,102,230	153,77,230	153,51,230	153,26,230	153,0,230
11	153,255,255	153,230,255	153,204,255	153,179,255	153,153,255	153,128,255	153,102,255	153,77,255	153,51,255	153,26,255	153,0,255

[0347] CMY颜色空间正六面体内截面的可视化，如下表15所示。

[0348] 表15

[0349]

t=6	1	2	3	4	5	6	7	8	9	10	11
1	128,255,0	128,230,0	128,204,0	128,179,0	128,153,0	128,128,0	128,102,0	128,77,0	128,51,0	128,26,0	128,0,0
2	128,255,26	128,230,26	128,204,26	128,179,26	128,153,26	128,128,26	128,102,26	128,77,26	128,51,26	128,26,26	128,0,26
3	128,255,51	128,230,51	128,204,51	128,179,51	128,153,51	128,128,51	128,102,51	128,77,51	128,51,51	128,26,51	128,0,51
4	128,255,77	128,230,77	128,204,77	128,179,77	128,153,77	128,128,77	128,102,77	128,77,77	128,51,77	128,26,77	128,0,77
5	128,255,102	128,230,102	128,204,102	128,179,102	128,153,102	128,128,102	128,102,102	128,77,102	128,51,102	128,26,102	128,0,102
6	128,255,128	128,230,128	128,204,128	128,179,128	128,153,128	128,128,128	128,102,128	128,77,128	128,51,128	128,26,128	128,0,128
7	128,255,153	128,230,153	128,204,153	128,179,153	128,153,153	128,128,153	128,102,153	128,77,153	128,51,153	128,26,153	128,0,153
8	128,255,179	128,230,179	128,204,179	128,179,179	128,153,179	128,128,179	128,102,179	128,77,179	128,51,179	128,26,179	128,0,179
9	128,255,204	128,230,204	128,204,204	128,179,204	128,153,204	128,128,204	128,102,204	128,77,204	128,51,204	128,26,204	128,0,204
10	128,255,230	128,230,230	128,204,230	128,179,230	128,153,230	128,128,230	128,102,230	128,77,230	128,51,230	128,26,230	128,0,230
11	128,255,255	128,230,255	128,204,255	128,179,255	128,153,255	128,128,255	128,102,255	128,77,255	128,51,255	128,26,255	128,0,255

[0351] CMY颜色空间正六面体内截面的可视化，如下表16所示。

[0352] 表16

[0353]

t=7	1	2	3	4	5	6	7	8	9	10	11
1	102,255,0	102,230,0	102,204,0	102,179,0	102,153,0	102,128,0	102,102,0	102,77,0	102,51,0	102,26,0	102,0,0
2	102,255,26	102,230,26	102,204,26	102,179,26	102,153,26	102,128,26	102,102,26	102,77,26	102,51,26	102,26,26	102,0,26
3	102,255,51	102,230,51	102,204,51	102,179,51	102,153,51	102,128,51	102,102,51	102,77,51	102,51,51	102,26,51	102,0,51
4	102,255,77	102,230,77	102,204,77	102,179,77	102,153,77	102,128,77	102,102,77	102,77,77	102,51,77	102,26,77	102,0,77
5	102,255,102	102,230,102	102,204,102	102,179,102	102,153,102	102,128,102	102,102,102	102,77,102	102,51,102	102,26,102	102,0,102
6	102,255,128	102,230,128	102,204,128	102,179,128	102,153,128	102,128,128	102,102,128	102,77,128	102,51,128	102,26,128	102,0,128

7	102, 255, 153	102, 230, 153	102, 204, 153	102, 179, 153	102, 153, 153	102, 128, 153	102, 102, 153	102, 77,153	102, 51,153	102, 26,153	102,0, 153
8	102, 255, 179	102, 230, 179	102, 204, 179	102, 179, 179	102, 153, 179	102, 128, 179	102, 102, 179	102, 77,179	102, 51,179	102, 26,179	102,0, 179
9	102, 255, 204	102, 230, 204	102, 204, 204	102, 179, 204	102, 153, 204	102, 128, 204	102, 102, 204	102, 77,204	102, 51,204	102, 26,204	102,0, 204
10	102, 255, 230	102, 230, 230	102, 204, 230	102, 179, 230	102, 153, 230	102, 128, 230	102, 102, 230	102, 77,230	102, 51,230	102, 26,230	102,0, 230
11	102, 255, 255	102, 230, 255	102, 204, 255	102, 179, 255	102, 153, 255	102, 128, 255	102, 102, 255	102, 77,255	102, 51,255	102, 26,255	102,0, 255

[0354] CMY颜色空间正六面体内截面的可视化,如下表17所示。

[0355] 表17

[0356]

t=8	1	2	3	4	5	6	7	8	9	10	11
1	77, 255,0	77,230, 0	77,204, 0	77,179, 0	77,153, 0	77,128, 0	77,102, 0	77,77, 0	77,51, 0	77,26, 0	77,0,0
2	77, 255, 26	77,230, 26	77,204, 26	77,179, 26	77,153, 26	77,128, 26	77,102, 26	77,77, 26	77,51, 26	77,26, 26	77,0, 26
3	77, 255, 51	77,230, 51	77,204, 51	77,179, 51	77,153, 51	77,128, 51	77,102, 51	77,77, 51	77,51, 51	77,26, 51	77,0, 51
4	77, 255, 77	77,230, 77	77,204, 77	77,179, 77	77,153, 77	77,128, 77	77,102, 77	77,77, 77	77,51, 77	77,26, 77	77,0, 77
5	77, 255, 102	77,230, 102	77,204, 102	77,179, 102	77,153, 102	77,128, 102	77,102, 102	77,77, 102	77,51, 102	77,26, 102	77,0, 102
6	77, 255, 128	77,230, 128	77,204, 128	77,179, 128	77,153, 128	77,128, 128	77,102, 128	77,77, 128	77,51, 128	77,26, 128	77,0, 128
7	77, 255, 153	77,230, 153	77,204, 153	77,179, 153	77,153, 153	77,128, 153	77,102, 153	77,77, 153	77,51, 153	77,26, 153	77,0, 153
8	77, 255, 179	77,230, 179	77,204, 179	77,179, 179	77,153, 179	77,128, 179	77,102, 179	77,77, 179	77,51, 179	77,26, 179	77,0, 179
9	77, 255, 204	77,230, 204	77,204, 204	77,179, 204	77,153, 204	77,128, 204	77,102, 204	77,77, 204	77,51, 204	77,26, 204	77,0, 204

| 10 | 77,255,230 | 77,230,230 | 77,204,230 | 77,179,230 | 77,153,230 | 77,128,230 | 77,102,230 | 77,77,230 | 77,51,230 | 77,26,230 | 77,0,230 |
| 11 | 77,255,255 | 77,230,255 | 77,204,255 | 77,179,255 | 77,153,255 | 77,128,255 | 77,102,255 | 77,77,255 | 77,51,255 | 77,26,255 | 77,0,255 |

[0357] CMY颜色空间正六面体内截面的可视化,如下表18所示。

[0358] 表18

[0359]

[0360]

t=9	1	2	3	4	5	6	7	8	9	10	11
1	51,255,0	51,230,0	51,204,0	51,179,0	51,153,0	51,128,0	51,102,0	51,77,0	51,51,0	51,26,0	51,0,0
2	51,255,26	51,230,26	51,204,26	51,179,26	51,153,26	51,128,26	51,102,26	51,77,26	51,51,26	51,26,26	51,0,26
3	51,255,51	51,230,51	51,204,51	51,179,51	51,153,51	51,128,51	51,102,51	51,77,51	51,51,51	51,26,51	51,0,51
4	51,255,77	51,230,77	51,204,77	51,179,77	51,153,77	51,128,77	51,102,77	51,77,77	51,51,77	51,26,77	51,0,77
5	51,255,102	51,230,102	51,204,102	51,179,102	51,153,102	51,128,102	51,102,102	51,77,102	51,51,102	51,26,102	51,0,102
6	51,255,128	51,230,128	51,204,128	51,179,128	51,153,128	51,128,128	51,102,128	51,77,128	51,51,128	51,26,128	51,0,128
7	51,255,153	51,230,153	51,204,153	51,179,153	51,153,153	51,128,153	51,102,153	51,77,153	51,51,153	51,26,153	51,0,153
8	51,255,179	51,230,179	51,204,179	51,179,179	51,153,179	51,128,179	51,102,179	51,77,179	51,51,179	51,26,179	51,0,179
9	51,255,204	51,230,204	51,204,204	51,179,204	51,153,204	51,128,204	51,102,204	51,77,204	51,51,204	51,26,204	51,0,204
10	51,255,230	51,230,230	51,204,230	51,179,230	51,153,230	51,128,230	51,102,230	51,77,230	51,51,230	51,26,230	51,0,230
11	51,255,255	51,230,255	51,204,255	51,179,255	51,153,255	51,128,255	51,102,255	51,77,255	51,51,255	51,26,255	51,0,255

[0361] CMY颜色空间正六面体内截面的可视化,如下表19所示。

[0362] 表19

[0363]

t=10	1	2	3	4	5	6	7	8	9	10	11
1	26,255,0	26,230,0	26,204,0	26,179,0	26,153,0	26,128,0	26,102,0	26,77,0	26,51,0	26,26,0	26,0,0
2	26,255,26	26,230,26	26,204,26	26,179,26	26,153,26	26,128,26	26,102,26	26,77,26	26,51,26	26,26,26	26,0,26
3	26,255,51	26,230,51	26,204,51	26,179,51	26,153,51	26,128,51	26,102,51	26,77,51	26,51,51	26,26,51	26,0,51
4	26,255,77	26,230,77	26,204,77	26,179,77	26,153,77	26,128,77	26,102,77	26,77,77	26,51,77	26,26,77	26,0,77
5	26,255,102	26,230,102	26,204,102	26,179,102	26,153,102	26,128,102	26,102,102	26,77,102	26,51,102	26,26,102	26,0,102
6	26,255,128	26,230,128	26,204,128	26,179,128	26,153,128	26,128,128	26,102,128	26,77,128	26,51,128	26,26,128	26,0,128
7	26,255,153	26,230,153	26,204,153	26,179,153	26,153,153	26,128,153	26,102,153	26,77,153	26,51,153	26,26,153	26,0,153
8	26,255,179	26,230,179	26,204,179	26,179,179	26,153,179	26,128,179	26,102,179	26,77,179	26,51,179	26,26,179	26,0,179

9	26,255,204	26,230,204	26,204,204	26,179,204	26,153,204	26,128,204	26,102,204	26,77,204	26,51,204	26,26,204	26,0,204
10	26,255,230	26,230,230	26,204,230	26,179,230	26,153,230	26,128,230	26,102,230	26,77,230	26,51,230	26,26,230	26,0,230
11	26,255,255	26,230,255	26,204,255	26,179,255	26,153,255	26,128,255	26,102,255	26,77,255	26,51,255	26,26,255	26,0,255

[0364] CMY颜色空间正六面体内截面的可视化，如下表20所示。

[0365] 表20

[0366]

t=11	1	2	3	4	5	6	7	8	9	10	11
1	0,255,0	0,230,0	0,204,0	0,179,0	0,153,0	0,128,0	0,102,0	0,77,0	0,51,0	0,26,0	0,0,0
2	0,255,26	0,230,26	0,204,26	0,179,26	0,153,26	0,128,26	0,102,26	0,77,26	0,51,26	0,26,26	0,0,26
3	0,255,51	0,230,51	0,204,51	0,179,51	0,153,51	0,128,51	0,102,51	0,77,51	0,51,51	0,26,51	0,0,51
4	0,255,77	0,230,77	0,204,77	0,179,77	0,153,77	0,128,77	0,102,77	0,77,77	0,51,77	0,26,77	0,0,77
5	0,255,102	0,230,102	0,204,102	0,179,102	0,153,102	0,128,102	0,102,102	0,77,102	0,51,102	0,26,102	0,0,102
6	0,255,128	0,230,128	0,204,128	0,179,128	0,153,128	0,128,128	0,102,128	0,77,128	0,51,128	0,26,128	0,0,128
7	0,255,153	0,230,153	0,204,153	0,179,153	0,153,153	0,128,153	0,102,153	0,77,153	0,51,153	0,26,153	0,0,153
8	0,255,179	0,230,179	0,204,179	0,179,179	0,153,179	0,128,179	0,102,179	0,77,179	0,51,179	0,26,179	0,0,179
9	0,255,204	0,230,204	0,204,204	0,179,204	0,153,204	0,128,204	0,102,204	0,77,204	0,51,204	0,26,204	0,0,204
10	0,255,230	0,230,230	0,204,230	0,179,230	0,153,230	0,128,230	0,102,230	0,77,230	0,51,230	0,26,230	0,0,230
11	0,255,255	0,230,255	0,204,255	0,179,255	0,153,255	0,128,255	0,102,255	0,77,255	0,51,255	0,26,255	0,0,255

[0367] (2)在CMY颜色空间中，可得到过$\overline{WM}$段各网格点且与$\overline{WM}$垂直的11个截面，其中，CMY颜色空间正六面体内截面的可视化，如下表21所示。

[0368] 表21

[0369]

n=1	1	2	3	4	5	6	7	8	9	10	11
1	0,255,0	26,255,0	51,255,0	77,255,0	102,255,0	128,255,0	153,255,0	179,255,0	204,255,0	230,255,0	255,255,0
2	0,255,26	26,255,26	51,255,26	77,255,26	102,255,26	128,255,26	153,255,26	179,255,26	204,255,26	230,255,26	255,255,26
3	0,255,51	26,255,51	51,255,51	77,255,51	102,255,51	128,255,51	153,255,51	179,255,51	204,255,51	230,255,51	255,255,51

37

4	0,255,77	26,255,77	51,255,77	77,255,77	102,255,77	128,255,77	153,255,77	179,255,77	204,255,77	230,255,77	255,255,77
5	0,255,102	26,255,102	51,255,102	77,255,102	102,255,102	128,255,102	153,255,102	179,255,102	204,255,102	230,255,102	255,255,102
6	0,255,128	26,255,128	51,255,128	77,255,128	102,255,128	128,255,128	153,255,128	179,255,128	204,255,128	230,255,128	255,255,128
7	0,255,153	26,255,153	51,255,153	77,255,153	102,255,153	128,255,153	153,255,153	179,255,153	204,255,153	230,255,153	255,255,153
8	0,255,179	26,255,179	51,255,179	77,255,179	102,255,179	128,255,179	153,255,179	179,255,179	204,255,179	230,255,179	255,255,179
9	0,255,204	26,255,204	51,255,204	77,255,204	102,255,204	128,255,204	153,255,204	179,255,204	204,255,204	230,255,204	255,255,204
10	0,255,230	26,255,230	51,255,230	77,255,230	102,255,230	128,255,230	153,255,230	179,255,230	204,255,230	230,255,230	255,255,230
11	0,255,255	26,255,255	51,255,255	77,255,255	102,255,255	128,255,255	153,255,255	179,255,255	204,255,255	230,255,255	255,255,255

[0370]　CMY颜色空间正六面体内截面的可视化，如下表22所示。

[0371]　表22

[0372]

n＝2	1	2	3	4	5	6	7	8	9	10	11
1	0,230,0	26,230,0	51,230,0	77,230,0	102,230,0	128,230,0	153,230,0	179,230,0	204,230,0	230,230,0	255,230,0
2	0,230,26	26,230,26	51,230,26	77,230,26	102,230,26	128,230,26	153,230,26	179,230,26	204,230,26	230,230,26	255,230,26
3	0,230,51	26,230,51	51,230,51	77,230,51	102,230,51	128,230,51	153,230,51	179,230,51	204,230,51	230,230,51	255,230,51
4	0,230,77	26,230,77	51,230,77	77,230,77	102,230,77	128,230,77	153,230,77	179,230,77	204,230,77	230,230,77	255,230,77
5	0,230,102	26,230,102	51,230,102	77,230,102	102,230,102	128,230,102	153,230,102	179,230,102	204,230,102	230,230,102	255,230,102
6	0,230,128	26,230,128	51,230,128	77,230,128	102,230,128	128,230,128	153,230,128	179,230,128	204,230,128	230,230,128	255,230,128
7	0,230,153	26,230,153	51,230,153	77,230,153	102,230,153	128,230,153	153,230,153	179,230,153	204,230,153	230,230,153	255,230,153
8	0,230,179	26,230,179	51,230,179	77,230,179	102,230,179	128,230,179	153,230,179	179,230,179	204,230,179	230,230,179	255,230,179

9	0,230,204	26,230,204	51,230,204	77,230,204	102,230,204	128,230,204	153,230,204	179,230,204	204,230,204	230,230,204	255,230,204
10	0,230,230	26,230,230	51,230,230	77,230,230	102,230,230	128,230,230	153,230,230	179,230,230	204,230,230	230,230,230	255,230,230
11	0,230,255	26,230,255	51,230,255	77,230,255	102,230,255	128,230,255	153,230,255	179,230,255	204,230,255	230,230,255	255,230,255

[0373] CMY颜色空间正六面体内截面的可视化，如下表23所示。

[0374] 表23

[0375]

n＝3	1	2	3	4	5	6	7	8	9	10	11
1	0,204,0	26,204,0	51,204,0	77,204,0	102,204,0	128,204,0	153,204,0	179,204,0	204,204,0	230,204,0	255,204,0
2	0,204,26	26,204,26	51,204,26	77,204,26	102,204,26	128,204,26	153,204,26	179,204,26	204,204,26	230,204,26	255,204,26
3	0,204,51	26,204,51	51,204,51	77,204,51	102,204,51	128,204,51	153,204,51	179,204,51	204,204,51	230,204,51	255,204,51
4	0,204,77	26,204,77	51,204,77	77,204,77	102,204,77	128,204,77	153,204,77	179,204,77	204,204,77	230,204,77	255,204,77
5	0,204,102	26,204,102	51,204,102	77,204,102	102,204,102	128,204,102	153,204,102	179,204,102	204,204,102	230,204,102	255,204,102
6	0,204,128	26,204,128	51,204,128	77,204,128	102,204,128	128,204,128	153,204,128	179,204,128	204,204,128	230,204,128	255,204,128
7	0,204,153	26,204,153	51,204,153	77,204,153	102,204,153	128,204,153	153,204,153	179,204,153	204,204,153	230,204,153	255,204,153
8	0,204,179	26,204,179	51,204,179	77,204,179	102,204,179	128,204,179	153,204,179	179,204,179	204,204,179	230,204,179	255,204,179
9	0,204,204	26,204,204	51,204,204	77,204,204	102,204,204	128,204,204	153,204,204	179,204,204	204,204,204	230,204,204	255,204,204
10	0,204,230	26,204,230	51,204,230	77,204,230	102,204,230	128,204,230	153,204,230	179,204,230	204,204,230	230,204,230	255,204,230
11	0,204,255	26,204,255	51,204,255	77,204,255	102,204,255	128,204,255	153,204,255	179,204,255	204,204,255	230,204,255	255,204,255

[0376] CMY颜色空间正六面体内截面的可视化，如下表24所示。

[0377] 表24

[0378]

n＝4	1	2	3	4	5	6	7	8	9	10	11
1	0,179,0	26,179,0	51,179,0	77,179,0	102,179,0	128,179,0	153,179,0	179,179,0	204,179,0	230,179,0	255,179,0

2	0,179,26	26,179,26	51,179,26	77,179,26	102,179,26	128,179,26	153,179,26	179,179,26	204,179,26	230,179,26	255,179,26
3	0,179,51	26,179,51	51,179,51	77,179,51	102,179,51	128,179,51	153,179,51	179,179,51	204,179,51	230,179,51	255,179,51
4	0,179,77	26,179,77	51,179,77	77,179,77	102,179,77	128,179,77	153,179,77	179,179,77	204,179,77	230,179,77	255,179,77
5	0,179,102	26,179,102	51,179,102	77,179,102	102,179,102	128,179,102	153,179,102	179,179,102	204,179,102	230,179,102	255,179,102
6	0,179,128	26,179,128	51,179,128	77,179,128	102,179,128	128,179,128	153,179,128	179,179,128	204,179,128	230,179,128	255,179,128
7	0,179,153	26,179,153	51,179,153	77,179,153	102,179,153	128,179,153	153,179,153	179,179,153	204,179,153	230,179,153	255,179,153
8	0,179,179	26,179,179	51,179,179	77,179,179	102,179,179	128,179,179	153,179,179	179,179,179	204,179,179	230,179,179	255,179,179
9	0,179,204	26,179,204	51,179,204	77,179,204	102,179,204	128,179,204	153,179,204	179,179,204	204,179,204	230,179,204	255,179,204
10	0,179,230	26,179,230	51,179,230	77,179,230	102,179,230	128,179,230	153,179,230	179,179,230	204,179,230	230,179,230	255,179,230
11	0,179,255	26,179,255	51,179,255	77,179,255	102,179,255	128,179,255	153,179,255	179,179,255	204,179,255	230,179,255	255,179,255

[0379] CMY颜色空间正六面体内截面的可视化,如下表25所示。

[0380] 表25

[0381]

n＝5	1	2	3	4	5	6	7	8	9	10	11
1	0,153,0	26,153,0	51,153,0	77,153,0	102,153,0	128,153,0	153,153,0	179,153,0	204,153,0	230,153,0	255,153,0
2	0,153,26	26,153,26	51,153,26	77,153,26	102,153,26	128,153,26	153,153,26	179,153,26	204,153,26	230,153,26	255,153,26
3	0,153,51	26,153,51	51,153,51	77,153,51	102,153,51	128,153,51	153,153,51	179,153,51	204,153,51	230,153,51	255,153,51
4	0,153,77	26,153,77	51,153,77	77,153,77	102,153,77	128,153,77	153,153,77	179,153,77	204,153,77	230,153,77	255,153,77
5	0,153,102	26,153,102	51,153,102	77,153,102	102,153,102	128,153,102	153,153,102	179,153,102	204,153,102	230,153,102	255,153,102
6	0,153,128	26,153,128	51,153,128	77,153,128	102,153,128	128,153,128	153,153,128	179,153,128	204,153,128	230,153,128	255,153,128

40

7	0,153,153	26,153,153	51,153,153	77,153,153	102,153,153	128,153,153	153,153,153	179,153,153	204,153,153	230,153,153	255,153,153
8	0,153,179	26,153,179	51,153,179	77,153,179	102,153,179	128,153,179	153,153,179	179,153,179	204,153,179	230,153,179	255,153,179
9	0,153,204	26,153,204	51,153,204	77,153,204	102,153,204	128,153,204	153,153,204	179,153,204	204,153,204	230,153,204	255,153,204
10	0,153,230	26,153,230	51,153,230	77,153,230	102,153,230	128,153,230	153,153,230	179,153,230	204,153,230	230,153,230	255,153,230
11	0,153,255	26,153,255	51,153,255	77,153,255	102,153,255	128,153,255	153,153,255	179,153,255	204,153,255	230,153,255	255,153,255

[0382]　CMY颜色空间正六面体内截面的可视化,如下表26所示。

[0383]　表26

[0384]

n=6	1	2	3	4	5	6	7	8	9	10	11
1	0,128,0	26,128,0	51,128,0	77,128,0	102,128,0	128,128,0	153,128,0	179,128,0	204,128,0	230,128,0	255,128,0
2	0,128,26	26,128,26	51,128,26	77,128,26	102,128,26	128,128,26	153,128,26	179,128,26	204,128,26	230,128,26	255,128,26
3	0,128,51	26,128,51	51,128,51	77,128,51	102,128,51	128,128,51	153,128,51	179,128,51	204,128,51	230,128,51	255,128,51
4	0,128,77	26,128,77	51,128,77	77,128,77	102,128,77	128,128,77	153,128,77	179,128,77	204,128,77	230,128,77	255,128,77
5	0,128,102	26,128,102	51,128,102	77,128,102	102,128,102	128,128,102	153,128,102	179,128,102	204,128,102	230,128,102	255,128,102
6	0,128,128	26,128,128	51,128,128	77,128,128	102,128,128	128,128,128	153,128,128	179,128,128	204,128,128	230,128,128	255,128,128
7	0,128,153	26,128,153	51,128,153	77,128,153	102,128,153	128,128,153	153,128,153	179,128,153	204,128,153	230,128,153	255,128,153
8	0,128,179	26,128,179	51,128,179	77,128,179	102,128,179	128,128,179	153,128,179	179,128,179	204,128,179	230,128,179	255,128,179
9	0,128,204	26,128,204	51,128,204	77,128,204	102,128,204	128,128,204	153,128,204	179,128,204	204,128,204	230,128,204	255,128,204
10	0,128,230	26,128,230	51,128,230	77,128,230	102,128,230	128,128,230	153,128,230	179,128,230	204,128,230	230,128,230	255,128,230

| 11 | 0,128,255 | 26,128,255 | 51,128,255 | 77,128,255 | 102,128,255 | 128,128,255 | 153,128,255 | 179,128,255 | 204,128,255 | 230,128,255 | 255,128,255 |

[0385] CMY颜色空间正六面体内截面的可视化,如下表27所示。

[0386] 表27

[0387]

n=7	1	2	3	4	5	6	7	8	9	10	11
1	0,102,0	26,102,0	51,102,0	77,102,0	102,102,0	128,102,0	153,102,0	179,102,0	204,102,0	230,102,0	255,102,0
2	0,102,26	26,102,26	51,102,26	77,102,26	102,102,26	128,102,26	153,102,26	179,102,26	204,102,26	230,102,26	255,102,26
3	0,102,51	26,102,51	51,102,51	77,102,51	102,102,51	128,102,51	153,102,51	179,102,51	204,102,51	230,102,51	255,102,51
4	0,102,77	26,102,77	51,102,77	77,102,77	102,102,77	128,102,77	153,102,77	179,102,77	204,102,77	230,102,77	255,102,77
5	0,102,102	26,102,102	51,102,102	77,102,102	102,102,102	128,102,102	153,102,102	179,102,102	204,102,102	230,102,102	255,102,102
6	0,102,128	26,102,128	51,102,128	77,102,128	102,102,128	128,102,128	153,102,128	179,102,128	204,102,128	230,102,128	255,102,128
7	0,102,153	26,102,153	51,102,153	77,102,153	102,102,153	128,102,153	153,102,153	179,102,153	204,102,153	230,102,153	255,102,153
8	0,102,179	26,102,179	51,102,179	77,102,179	102,102,179	128,102,179	153,102,179	179,102,179	204,102,179	230,102,179	255,102,179
9	0,102,204	26,102,204	51,102,204	77,102,204	102,102,204	128,102,204	153,102,204	179,102,204	204,102,204	230,102,204	255,102,204
10	0,102,230	26,102,230	51,102,230	77,102,230	102,102,230	128,102,230	153,102,230	179,102,230	204,102,230	230,102,230	255,102,230
11	0,102,255	26,102,255	51,102,255	77,102,255	102,102,255	128,102,255	153,102,255	179,102,255	204,102,255	230,102,255	255,102,255

[0388] CMY颜色空间正六面体内截面的可视化,如下表28所示。

[0389] 表28

[0390]

n=8	1	2	3	4	5	6	7	8	9	10	11
1	0,77,0	26,77,0	51,77,0	77,77,0	102,77,0	128,77,0	153,77,0	179,77,0	204,77,0	230,77,0	255,77,0
2	0,77,26	26,77,26	51,77,26	77,77,26	102,77,26	128,77,26	153,77,26	179,77,26	204,77,26	230,77,26	255,77,26
3	0,77,51	26,77,51	51,77,51	77,77,51	102,77,51	128,77,51	153,77,51	179,77,51	204,77,51	230,77,51	255,77,51

	1	2	3	4	5	6	7	8	9	10	11
4	0,77,77	26,77,77	51,77,77	77,77,77	102,77,77	128,77,77	153,77,77	179,77,77	204,77,77	230,77,77	255,77,77
5	0,77,102	26,77,102	51,77,102	77,77,102	102,77,102	128,77,102	153,77,102	179,77,102	204,77,102	230,77,102	255,77,102
6	0,77,128	26,77,128	51,77,128	77,77,128	102,77,128	128,77,128	153,77,128	179,77,128	204,77,128	230,77,128	255,77,128
7	0,77,153	26,77,153	51,77,153	77,77,153	102,77,153	128,77,153	153,77,153	179,77,153	204,77,153	230,77,153	255,77,153
8	0,77,179	26,77,179	51,77,179	77,77,179	102,77,179	128,77,179	153,77,179	179,77,179	204,77,179	230,77,179	255,77,179
9	0,77,204	26,77,204	51,77,204	77,77,204	102,77,204	128,77,204	153,77,204	179,77,204	204,77,204	230,77,204	255,77,204
10	0,77,230	26,77,230	51,77,230	77,77,230	102,77,230	128,77,230	153,77,230	179,77,230	204,77,230	230,77,230	255,77,230
11	0,77,255	26,77,255	51,77,255	77,77,255	102,77,255	128,77,255	153,77,255	179,77,255	204,77,255	230,77,255	255,77,255

[0391] CMY颜色空间正六面体内截面的可视化，如下表29所示。

[0392] 表29

n=9	1	2	3	4	5	6	7	8	9	10	11
1	0,51,0	26,51,0	51,51,0	77,51,0	102,51,0	128,51,0	153,51,0	179,51,0	204,51,0	230,51,0	255,51,0
2	0,51,26	26,51,26	51,51,26	77,51,26	102,51,26	128,51,26	153,51,26	179,51,26	204,51,26	230,51,26	255,51,26
3	0,51,51	26,51,51	51,51,51	77,51,51	102,51,51	128,51,51	153,51,51	179,51,51	204,51,51	230,51,51	255,51,51
4	0,51,77	26,51,77	51,51,77	77,51,77	102,51,77	128,51,77	153,51,77	179,51,77	204,51,77	230,51,77	255,51,77
5	0,51,102	26,51,102	51,51,102	77,51,102	102,51,102	128,51,102	153,51,102	179,51,102	204,51,102	230,51,102	255,51,102
6	0,51,128	26,51,128	51,51,128	77,51,128	102,51,128	128,51,128	153,51,128	179,51,128	204,51,128	230,51,128	255,51,128
7	0,51,153	26,51,153	51,51,153	77,51,153	102,51,153	128,51,153	153,51,153	179,51,153	204,51,153	230,51,153	255,51,153
8	0,51,179	26,51,179	51,51,179	77,51,179	102,51,179	128,51,179	153,51,179	179,51,179	204,51,179	230,51,179	255,51,179
9	0,51,204	26,51,204	51,51,204	77,51,204	102,51,204	128,51,204	153,51,204	179,51,204	204,51,204	230,51,204	255,51,204
10	0,51,230	26,51,230	51,51,230	77,51,230	102,51,230	128,51,230	153,51,230	179,51,230	204,51,230	230,51,230	255,51,230
11	0,51,255	26,51,255	51,51,255	77,51,255	102,51,255	128,51,255	153,51,255	179,51,255	204,51,255	230,51,255	255,51,255

[0395] CMY颜色空间正六面体内截面的可视化，如下表30所示。

[0396] 表30

[0397]

n=10	1	2	3	4	5	6	7	8	9	10	11
1	0,26,0	26,26,0	51,26,0	77,26,0	102,26,0	128,26,0	153,26,0	179,26,0	204,26,0	230,26,0	255,26,0
2	0,26,26	26,26,26	51,26,26	77,26,26	102,26,26	128,26,26	153,26,26	179,26,26	204,26,26	230,26,26	255,26,26
3	0,26,51	26,26,51	51,26,51	77,26,51	102,26,51	128,26,51	153,26,51	179,26,51	204,26,51	230,26,51	255,26,51
4	0,26,77	26,26,77	51,26,77	77,26,77	102,26,77	128,26,77	153,26,77	179,26,77	204,26,77	230,26,77	255,26,77
5	0,26,102	26,26,102	51,26,102	77,26,102	102,26,102	128,26,102	153,26,102	179,26,102	204,26,102	230,26,102	255,26,102

	1	2	3	4	5	6	7	8	9	10	11
6	0,26,128	26,26,128	51,26,128	77,26,128	102,26,128	128,26,128	153,26,128	179,26,128	204,26,128	230,26,128	255,26,128
7	0,26,153	26,26,153	51,26,153	77,26,153	102,26,153	128,26,153	153,26,153	179,26,153	204,26,153	230,26,153	255,26,153
8	0,26,179	26,26,179	51,26,179	77,26,179	102,26,179	128,26,179	153,26,179	179,26,179	204,26,179	230,26,179	255,26,179
9	0,26,204	26,26,204	51,26,204	77,26,204	102,26,204	128,26,204	153,26,204	179,26,204	204,26,204	230,26,204	255,26,204
10	0,26,230	26,26,230	51,26,230	77,26,230	102,26,230	128,26,230	153,26,230	179,26,230	204,26,230	230,26,230	255,26,230
11	0,26,255	26,26,255	51,26,255	77,26,255	102,26,255	128,26,255	153,26,255	179,26,255	204,26,255	230,26,255	255,26,255

[0398]　　CMY颜色空间正六面体内截面的可视化,如下表31所示。

[0399]　　表31

[0400]

n=11	1	2	3	4	5	6	7	8	9	10	11
1	0,0,0	26,0,0	51,0,0	77,0,0	102,0,0	128,0,0	153,0,0	179,0,0	204,0,0	230,0,0	255,0,0
2	0,0,26	26,0,26	51,0,26	77,0,26	102,0,26	128,0,26	153,0,26	179,0,26	204,0,26	230,0,26	255,0,26
3	0,0,51	26,0,51	51,0,51	77,0,51	102,0,51	128,0,51	153,0,51	179,0,51	204,0,51	230,0,51	255,0,51
4	0,0,77	26,0,77	51,0,77	77,0,77	102,0,77	128,0,77	153,0,77	179,0,77	204,0,77	230,0,77	255,0,77
5	0,0,102	26,0,102	51,0,102	77,0,102	102,0,102	128,0,102	153,0,102	179,0,102	204,0,102	230,0,102	255,0,102
6	0,0,128	26,0,128	51,0,128	77,0,128	102,0,128	128,0,128	153,0,128	179,0,128	204,0,128	230,0,128	255,0,128
7	0,0,153	26,0,153	51,0,153	77,0,153	102,0,153	128,0,153	153,0,153	179,0,153	204,0,153	230,0,153	255,0,153
8	0,0,179	26,0,179	51,0,179	77,0,179	102,0,179	128,0,179	153,0,179	179,0,179	204,0,179	230,0,179	255,0,179
9	0,0,204	26,0,204	51,0,204	77,0,204	102,0,204	128,0,204	153,0,204	179,0,204	204,0,204	230,0,204	255,0,204
10	0,0,230	26,0,230	51,0,230	77,0,230	102,0,230	128,0,230	153,0,230	179,0,230	204,0,230	230,0,230	255,0,230
11	0,0,255	26,0,255	51,0,255	77,0,255	102,0,255	128,0,255	153,0,255	179,0,255	204,0,255	230,0,255	255,0,255

[0401]　　(3) 在CMY颜色空间中,可得到过$\overline{WY}$段各网格点且与$\overline{WY}$垂直的11个截面,其中,CMY颜色空间正六面体内截面的可视化,如下表32所示。

[0402]　　表32

44

[0403]

p=1	1	2	3	4	5	6	7	8	9	10	11
1	255,255,255	255,230,255	255,204,255	255,179,255	255,153,255	255,128,255	255,102,255	255,77,255	255,51,255	255,26,255	255,0,255
2	230,255,255	230,230,255	230,204,255	230,179,255	230,153,255	230,128,255	230,102,255	230,77,255	230,51,255	230,26,255	230,0,255
3	204,255,255	204,230,255	204,204,255	204,179,255	204,153,255	204,128,255	204,102,255	204,77,255	204,51,255	204,26,255	204,0,255
4	179,255,255	179,230,255	179,204,255	179,179,255	179,153,255	179,128,255	179,102,255	179,77,255	179,51,255	179,26,255	179,0,255
5	153,255,255	153,230,255	153,204,255	153,179,255	153,153,255	153,128,255	153,102,255	153,77,255	153,51,255	153,26,255	153,0,255
6	128,255,255	128,230,255	128,204,255	128,179,255	128,153,255	128,128,255	128,102,255	128,77,255	128,51,255	128,26,255	128,0,255
7	102,255,255	102,230,255	102,204,255	102,179,255	102,153,255	102,128,255	102,102,255	102,77,255	102,51,255	102,26,255	102,0,255

[0404]

	1	2	3	4	5	6	7	8	9	10	11
8	77,255,255	77,230,255	77,204,255	77,179,255	77,153,255	77,128,255	77,102,255	77,77,255	77,51,255	77,26,255	77,0,255
9	51,255,255	51,230,255	51,204,255	51,179,255	51,153,255	51,128,255	51,102,255	51,77,255	51,51,255	51,26,255	51,0,255
10	26,255,255	26,230,255	26,204,255	26,179,255	26,153,255	26,128,255	26,102,255	26,77,255	26,51,255	26,26,255	26,0,255
11	0,255,255	0,230,255	0,204,255	0,179,255	0,153,255	0,128,255	0,102,255	0,77,255	0,51,255	0,26,255	0,0,255

[0405] CMY颜色空间正六面体内截面的可视化，如下表33所示。

[0406] 表33

[0407]

p＝2	1	2	3	4	5	6	7	8	9	10	11
1	255,255,230	255,230,230	255,204,230	255,179,230	255,153,230	255,128,230	255,102,230	255,77,230	255,51,230	255,26,230	255,0,230
2	230,255,230	230,230,230	230,204,230	230,179,230	230,153,230	230,128,230	230,102,230	230,77,230	230,51,230	230,26,230	230,0,230
3	204,255,230	204,230,230	204,204,230	204,179,230	204,153,230	204,128,230	204,102,230	204,77,230	204,51,230	204,26,230	204,0,230
4	179,255,230	179,230,230	179,204,230	179,179,230	179,153,230	179,128,230	179,102,230	179,77,230	179,51,230	179,26,230	179,0,230
5	153,255,230	153,230,230	153,204,230	153,179,230	153,153,230	153,128,230	153,102,230	153,77,230	153,51,230	153,26,230	153,0,230
6	128,255,230	128,230,230	128,204,230	128,179,230	128,153,230	128,128,230	128,102,230	128,77,230	128,51,230	128,26,230	128,0,230
7	102,255,230	102,230,230	102,204,230	102,179,230	102,153,230	102,128,230	102,102,230	102,77,230	102,51,230	102,26,230	102,0,230
8	77,255,230	77,230,230	77,204,230	77,179,230	77,153,230	77,128,230	77,102,230	77,77,230	77,51,230	77,26,230	77,0,230
9	51,255,230	51,230,230	51,204,230	51,179,230	51,153,230	51,128,230	51,102,230	51,77,230	51,51,230	51,26,230	51,0,230
10	26,255,230	26,230,230	26,204,230	26,179,230	26,153,230	26,128,230	26,102,230	26,77,230	26,51,230	26,26,230	26,0,230
11	0,255,230	0,230,230	0,204,230	0,179,230	0,153,230	0,128,230	0,102,230	0,77,230	0,51,230	0,26,230	0,0,230

[0408] CMY颜色空间正六面体内截面的可视化，如下表34所示。

[0409] 表34

[0410]

p＝3	1	2	3	4	5	6	7	8	9	10	11
1	255,255,204	255,230,204	255,204,204	255,179,204	255,153,204	255,128,204	255,102,204	255,77,204	255,51,204	255,26,204	255,0,204
2	230,255,204	230,230,204	230,204,204	230,179,204	230,153,204	230,128,204	230,102,204	230,77,204	230,51,204	230,26,204	230,0,204
3	204,255,204	204,230,204	204,204,204	204,179,204	204,153,204	204,128,204	204,102,204	204,77,204	204,51,204	204,26,204	204,0,204
4	179,255,204	179,230,204	179,204,204	179,179,204	179,153,204	179,128,204	179,102,204	179,77,204	179,51,204	179,26,204	179,0,204
5	153,255,204	153,230,204	153,204,204	153,179,204	153,153,204	153,128,204	153,102,204	153,77,204	153,51,204	153,26,204	153,0,204
6	128,255,204	128,230,204	128,204,204	128,179,204	128,153,204	128,128,204	128,102,204	128,77,204	128,51,204	128,26,204	128,0,204
7	102,255,204	102,230,204	102,204,204	102,179,204	102,153,204	102,128,204	102,102,204	102,77,204	102,51,204	102,26,204	102,0,204
8	77,255,204	77,230,204	77,204,204	77,179,204	77,153,204	77,128,204	77,102,204	77,77,204	77,51,204	77,26,204	77,0,204
9	51,255,204	51,230,204	51,204,204	51,179,204	51,153,204	51,128,204	51,102,204	51,77,204	51,51,204	51,26,204	51,0,204
10	26,255,204	26,230,204	26,204,204	26,179,204	26,153,204	26,128,204	26,102,204	26,77,204	26,51,204	26,26,204	26,0,204
11	0,255,204	0,230,204	0,204,204	0,179,204	0,153,204	0,128,204	0,102,204	0,77,204	0,51,204	0,26,204	0,0,204

[0411] CMY颜色空间正六面体内截面的可视化，如下表35所示。

[0412] 表35

[0413]

p=4	1	2	3	4	5	6	7	8	9	10	11
1	255,255,179	255,230,179	255,204,179	255,179,179	255,153,179	255,128,179	255,102,179	255,77,179	255,51,179	255,26,179	255,0,179
2	230,255,179	230,230,179	230,204,179	230,179,179	230,153,179	230,128,179	230,102,179	230,77,179	230,51,179	230,26,179	230,0,179
3	204,255,179	204,230,179	204,204,179	204,179,179	204,153,179	204,128,179	204,102,179	204,77,179	204,51,179	204,26,179	204,0,179
4	179,255,179	179,230,179	179,204,179	179,179,179	179,153,179	179,128,179	179,102,179	179,77,179	179,51,179	179,26,179	179,0,179
5	153,255,179	153,230,179	153,204,179	153,179,179	153,153,179	153,128,179	153,102,179	153,77,179	153,51,179	153,26,179	153,0,179
6	128,255,179	128,230,179	128,204,179	128,179,179	128,153,179	128,128,179	128,102,179	128,77,179	128,51,179	128,26,179	128,0,179

46

7	102,255,179	102,230,179	102,204,179	102,179,179	102,153,179	102,128,179	102,102,179	102,77,179	102,51,179	102,26,179	102,0,179
8	77,255,179	77,230,179	77,204,179	77,179,179	77,153,179	77,128,179	77,102,179	77,77,179	77,51,179	77,26,179	77,0,179
9	51,255,179	51,230,179	51,204,179	51,179,179	51,153,179	51,128,179	51,102,179	51,77,179	51,51,179	51,26,179	51,0,179
10	26,255,179	26,230,179	26,204,179	26,179,179	26,153,179	26,128,179	26,102,179	26,77,179	26,51,179	26,26,179	26,0,179
11	0,255,179	0,230,179	0,204,179	0,179,179	0,153,179	0,128,179	0,102,179	0,77,179	0,51,179	0,26,179	0,0,179

[0415] CMY颜色空间正六面体内截面的可视化，如下表36所示。

[0416] 表36

[0417]

p＝5	1	2	3	4	5	6	7	8	9	10	11
1	255,255,153	255,230,153	255,204,153	255,179,153	255,153,153	255,128,153	255,102,153	255,77,153	255,51,153	255,26,153	255,0,153
2	230,255,153	230,230,153	230,204,153	230,179,153	230,153,153	230,128,153	230,102,153	230,77,153	230,51,153	230,26,153	230,0,153
3	204,255,153	204,230,153	204,204,153	204,179,153	204,153,153	204,128,153	204,102,153	204,77,153	204,51,153	204,26,153	204,0,153
4	179,255,153	179,230,153	179,204,153	179,179,153	179,153,153	179,128,153	179,102,153	179,77,153	179,51,153	179,26,153	179,0,153
5	153,255,153	153,230,153	153,204,153	153,179,153	153,153,153	153,128,153	153,102,153	153,77,153	153,51,153	153,26,153	153,0,153
6	128,255,153	128,230,153	128,204,153	128,179,153	128,153,153	128,128,153	128,102,153	128,77,153	128,51,153	128,26,153	128,0,153
7	102,255,153	102,230,153	102,204,153	102,179,153	102,153,153	102,128,153	102,102,153	102,77,153	102,51,153	102,26,153	102,0,153
8	77,255,153	77,230,153	77,204,153	77,179,153	77,153,153	77,128,153	77,102,153	77,77,153	77,51,153	77,26,153	77,0,153
9	51,255,153	51,230,153	51,204,153	51,179,153	51,153,153	51,128,153	51,102,153	51,77,153	51,51,153	51,26,153	51,0,153
10	26,255,153	26,230,153	26,204,153	26,179,153	26,153,153	26,128,153	26,102,153	26,77,153	26,51,153	26,26,153	26,0,153
11	0,255,153	0,230,153	0,204,153	0,179,153	0,153,153	0,128,153	0,102,153	0,77,153	0,51,153	0,26,153	0,0,153

[0418] CMY颜色空间正六面体内截面的可视化，如下表37所示。

[0419] 表37

[0420]

p＝6	1	2	3	4	5	6	7	8	9	10	11
1	255,255,128	255,230,128	255,204,128	255,179,128	255,153,128	255,128,128	255,102,128	255,77,128	255,51,128	255,26,128	255,0,128

2	230, 255, 128	230, 230, 128	230, 204, 128	230, 179, 128	230, 153, 128	230, 128, 128	230, 102, 128	230, 77,128	230, 51,128	230, 26,128	230,0, 128
3	204, 255, 128	204, 230, 128	204, 204, 128	204, 179, 128	204, 153, 128	204, 128, 128	204, 102, 128	204, 77,128	204, 51,128	204, 26,128	204,0, 128
4	179, 255, 128	179, 230, 128	179, 204, 128	179, 179, 128	179, 153, 128	179, 128, 128	179, 102, 128	179, 77,128	179, 51,128	179, 26,128	179,0, 128
5	153, 255, 128	153, 230, 128	153, 204, 128	153, 179, 128	153, 153, 128	153, 128, 128	153, 102, 128	153, 77,128	153, 51,128	153, 26,128	153,0, 128
6	128, 255, 128	128, 230, 128	128, 204, 128	128, 179, 128	128, 153, 128	128, 128, 128	128, 102, 128	128, 77,128	128, 51,128	128, 26,128	128,0, 128
7	102, 255, 128	102, 230, 128	102, 204, 128	102, 179, 128	102, 153, 128	102, 128, 128	102, 102, 128	102, 77,128	102, 51,128	102, 26,128	102,0, 128
8	77, 255, 128	77, 230, 128	77, 204, 128	77, 179, 128	77, 153, 128	77, 128, 128	77, 102, 128	77,77, 128	77,51, 128	77,26, 128	77,0, 128
9	51, 255, 128	51, 230, 128	51, 204, 128	51, 179, 128	51, 153, 128	51, 128, 128	51, 102, 128	51,77, 128	51,51, 128	51,26, 128	51,0, 128
10	26, 255, 128	26, 230, 128	26, 204, 128	26, 179, 128	26, 153, 128	26, 128, 128	26, 102, 128	26,77, 128	26,51, 128	26,26, 128	26,0, 128
11	0,255, 128	0,230, 128	0,204, 128	0,179, 128	0,153, 128	0,128, 128	0,102, 128	0,77, 128	0,51, 128	0,26, 128	0,0, 128

[0421]　CMY颜色空间正六面体内截面的可视化，如下表38所示。

[0422]　表38

[0423]

p=7	1	2	3	4	5	6	7	8	9	10	11
1	255,255,102	255,230,102	255,204,102	255,179,102	255,153,102	255,128,102	255,102,102	255,77,102	255,51,102	255,26,102	255,0,102
2	230,255,102	230,230,102	230,204,102	230,179,102	230,153,102	230,128,102	230,102,102	230,77,102	230,51,102	230,26,102	230,0,102
3	204,255,102	204,230,102	204,204,102	204,179,102	204,153,102	204,128,102	204,102,102	204,77,102	204,51,102	204,26,102	204,0,102
4	179,255,102	179,230,102	179,204,102	179,179,102	179,153,102	179,128,102	179,102,102	179,77,102	179,51,102	179,26,102	179,0,102
5	153,255,102	153,230,102	153,204,102	153,179,102	153,153,102	153,128,102	153,102,102	153,77,102	153,51,102	153,26,102	153,0,102

[0424]

6	128,255,102	128,230,102	128,204,102	128,179,102	128,153,102	128,128,102	128,102,102	128,77,102	128,51,102	128,26,102	128,0,102
7	102,255,102	102,230,102	102,204,102	102,179,102	102,153,102	102,128,102	102,102,102	102,77,102	102,51,102	102,26,102	102,0,102
8	77,255,102	77,230,102	77,204,102	77,179,102	77,153,102	77,128,102	77,102,102	77,77,102	77,51,102	77,26,102	77,0,102
9	51,255,102	51,230,102	51,204,102	51,179,102	51,153,102	51,128,102	51,102,102	51,77,102	51,51,102	51,26,102	51,0,102
10	26,255,102	26,230,102	26,204,102	26,179,102	26,153,102	26,128,102	26,102,102	26,77,102	26,51,102	26,26,102	26,0,102
11	0,255,102	0,230,102	0,204,102	0,179,102	0,153,102	0,128,102	0,102,102	0,77,102	0,51,102	0,26,102	0,0,102

[0425]　CMY颜色空间正六面体内截面的可视化，如下表39所示。

[0426]　表39

[0427]

p=8	1	2	3	4	5	6	7	8	9	10	11
1	255,255,77	255,230,77	255,204,77	255,179,77	255,153,77	255,128,77	255,102,77	255,77,77	255,51,77	255,26,77	255,0,77
2	230,255,77	230,230,77	230,204,77	230,179,77	230,153,77	230,128,77	230,102,77	230,77,77	230,51,77	230,26,77	230,0,77
3	204,255,77	204,230,77	204,204,77	204,179,77	204,153,77	204,128,77	204,102,77	204,77,77	204,51,77	204,26,77	204,0,77
4	179,255,77	179,230,77	179,204,77	179,179,77	179,153,77	179,128,77	179,102,77	179,77,77	179,51,77	179,26,77	179,0,77
5	153,255,77	153,230,77	153,204,77	153,179,77	153,153,77	153,128,77	153,102,77	153,77,77	153,51,77	153,26,77	153,0,77
6	128,255,77	128,230,77	128,204,77	128,179,77	128,153,77	128,128,77	128,102,77	128,77,77	128,51,77	128,26,77	128,0,77
7	102,255,77	102,230,77	102,204,77	102,179,77	102,153,77	102,128,77	102,102,77	102,77,77	102,51,77	102,26,77	102,0,77
8	77,255,77	77,230,77	77,204,77	77,179,77	77,153,77	77,128,77	77,102,77	77,77,77	77,51,77	77,26,77	77,0,77
9	51,255,77	51,230,77	51,204,77	51,179,77	51,153,77	51,128,77	51,102,77	51,77,77	51,51,77	51,26,77	51,0,77
10	26,255,77	26,230,77	26,204,77	26,179,77	26,153,77	26,128,77	26,102,77	26,77,77	26,51,77	26,26,77	26,0,77
11	0,255,77	0,230,77	0,204,77	0,179,77	0,153,77	0,128,77	0,102,77	0,77,77	0,51,77	0,26,77	0,0,77

[0428] CMY颜色空间正六面体内截面的可视化,如下表40所示。

[0429] 表40

[0430]

p=9	1	2	3	4	5	6	7	8	9	10	11
1	255,255,51	255,230,51	255,204,51	255,179,51	255,153,51	255,128,51	255,102,51	255,77,51	255,51,51	255,26,51	255,0,51
2	230,255,51	230,230,51	230,204,51	230,179,51	230,153,51	230,128,51	230,102,51	230,77,51	230,51,51	230,26,51	230,0,51
3	204,255,51	204,230,51	204,204,51	204,179,51	204,153,51	204,128,51	204,102,51	204,77,51	204,51,51	204,26,51	204,0,51
4	179,255,51	179,230,51	179,204,51	179,179,51	179,153,51	179,128,51	179,102,51	179,77,51	179,51,51	179,26,51	179,0,51
5	153,255,51	153,230,51	153,204,51	153,179,51	153,153,51	153,128,51	153,102,51	153,77,51	153,51,51	153,26,51	153,0,51
6	128,255,51	128,230,51	128,204,51	128,179,51	128,153,51	128,128,51	128,102,51	128,77,51	128,51,51	128,26,51	128,0,51
7	102,255,51	102,230,51	102,204,51	102,179,51	102,153,51	102,128,51	102,102,51	102,77,51	102,51,51	102,26,51	102,0,51
8	77,255,51	77,230,51	77,204,51	77,179,51	77,153,51	77,128,51	77,102,51	77,77,51	77,51,51	77,26,51	77,0,51
9	51,255,51	51,230,51	51,204,51	51,179,51	51,153,51	51,128,51	51,102,51	51,77,51	51,51,51	51,26,51	51,0,51

| 10 | 26,255,51 | 26,230,51 | 26,204,51 | 26,179,51 | 26,153,51 | 26,128,51 | 26,102,51 | 26,77,51 | 26,51,51 | 26,26,51 | 26,0,51 |
| 11 | 0,255,51 | 0,230,51 | 0,204,51 | 0,179,51 | 0,153,51 | 0,128,51 | 0,102,51 | 0,77,51 | 0,51,51 | 0,26,51 | 0,0,51 |

[0431] CMY颜色空间正六面体内截面的可视化，如下表41所示。

[0432] 表41

[0433]

[0434]

p=10	1	2	3	4	5	6	7	8	9	10	11
1	255,255,26	255,230,26	255,204,26	255,179,26	255,153,26	255,128,26	255,102,26	255,77,26	255,51,26	255,26,26	255,0,26
2	230,255,26	230,230,26	230,204,26	230,179,26	230,153,26	230,128,26	230,102,26	230,77,26	230,51,26	230,26,26	230,0,26
3	204,255,26	204,230,26	204,204,26	204,179,26	204,153,26	204,128,26	204,102,26	204,77,26	204,51,26	204,26,26	204,0,26
4	179,255,26	179,230,26	179,204,26	179,179,26	179,153,26	179,128,26	179,102,26	179,77,26	179,51,26	179,26,26	179,0,26
5	153,255,26	153,230,26	153,204,26	153,179,26	153,153,26	153,128,26	153,102,26	153,77,26	153,51,26	153,26,26	153,0,26
6	128,255,26	128,230,26	128,204,26	128,179,26	128,153,26	128,128,26	128,102,26	128,77,26	128,51,26	128,26,26	128,0,26
7	102,255,26	102,230,26	102,204,26	102,179,26	102,153,26	102,128,26	102,102,26	102,77,26	102,51,26	102,26,26	102,0,26
8	77,255,26	77,230,26	77,204,26	77,179,26	77,153,26	77,128,26	77,102,26	77,77,26	77,51,26	77,26,26	77,0,26
9	51,255,26	51,230,26	51,204,26	51,179,26	51,153,26	51,128,26	51,102,26	51,77,26	51,51,26	51,26,26	51,0,26
10	26,255,26	26,230,26	26,204,26	26,179,26	26,153,26	26,128,26	26,102,26	26,77,26	26,51,26	26,26,26	26,0,26
11	0,255,26	0,230,26	0,204,26	0,179,26	0,153,26	0,128,26	0,102,26	0,77,26	0,51,26	0,26,26	0,0,26

[0435] CMY颜色空间正六面体内截面的可视化，如下表42所示。

[0436] 表42

[0437]

p=11	1	2	3	4	5	6	7	8	9	10	11
1	255,255,0	255,230,0	255,204,0	255,179,0	255,153,0	255,128,0	255,102,0	255,77,0	255,51,0	255,26,0	255,0,0
2	230,255,0	230,230,0	230,204,0	230,179,0	230,153,0	230,128,0	230,102,0	230,77,0	230,51,0	230,26,0	230,0,0
3	204,255,0	204,230,0	204,204,0	204,179,0	204,153,0	204,128,0	204,102,0	204,77,0	204,51,0	204,26,0	204,0,0
4	179,255,0	179,230,0	179,204,0	179,179,0	179,153,0	179,128,0	179,102,0	179,77,0	179,51,0	179,26,0	179,0,0
5	153,255,0	153,230,0	153,204,0	153,179,0	153,153,0	153,128,0	153,102,0	153,77,0	153,51,0	153,26,0	153,0,0
6	128,255,0	128,230,0	128,204,0	128,179,0	128,153,0	128,128,0	128,102,0	128,77,0	128,51,0	128,26,0	128,0,0
7	102,255,0	102,230,0	102,204,0	102,179,0	102,153,0	102,128,0	102,102,0	102,77,0	102,51,0	102,26,0	102,0,0
8	77,255,0	77,230,0	77,204,0	77,179,0	77,153,0	77,128,0	77,102,0	77,77,0	77,51,0	77,26,0	77,0,0
9	51,255,0	51,230,0	51,204,0	51,179,0	51,153,0	51,128,0	51,102,0	51,77,0	51,51,0	51,26,0	51,0,0
10	26,255,0	26,230,0	26,204,0	26,179,0	26,153,0	26,128,0	26,102,0	26,77,0	26,51,0	26,26,0	26,0,0
11	0,255,0	0,230,0	0,204,0	0,179,0	0,153,0	0,128,0	0,102,0	0,77,0	0,51,0	0,26,0	0,0,0

[0438] 上面结合附图对本发明的实施方式作了详细说明，但是本发明并不限于上述实施

方式,在本领域普通技术人员所具备的知识范围内,还可以在不脱离本发明宗旨的前提下做出各种变化。
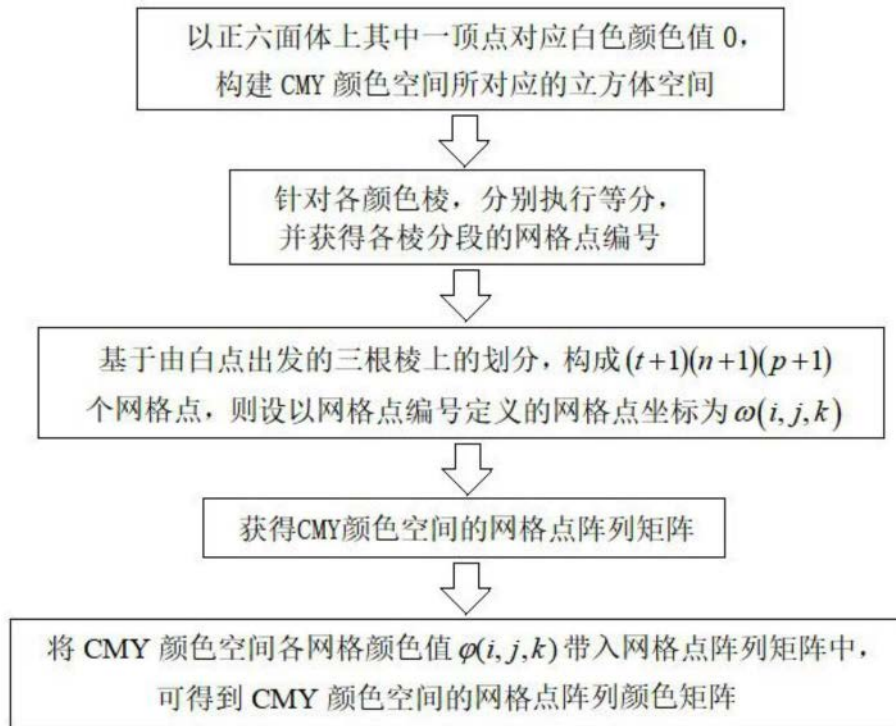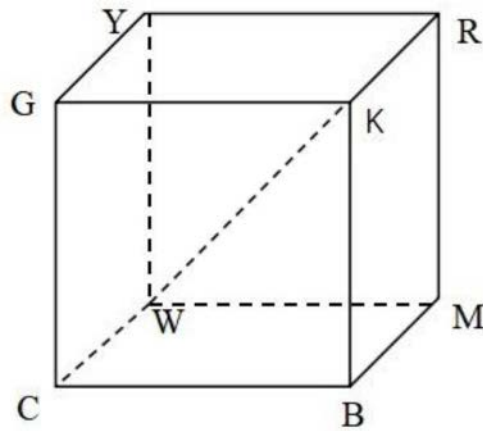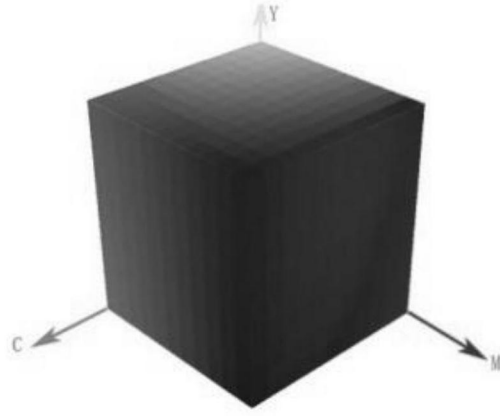
以正六面体上其中一顶点对应白色颜色值 0，构建 CMY 颜色空间所对应的立方体空间

⬇

针对各颜色棱，分别执行等分，并获得各棱分段的网格点编号

⬇

基于由白点出发的三根棱上的划分，构成 $(t+1)(n+1)(p+1)$ 个网格点，则设以网格点编号定义的网格点坐标为 $\omega(i,j,k)$

⬇

获得CMY颜色空间的网格点阵列矩阵

⬇

将 CMY 颜色空间各网格颜色值 $\varphi(i,j,k)$ 带入网格点阵列矩阵中，可得到 CMY 颜色空间的网格点阵列颜色矩阵

图1

图2

图3