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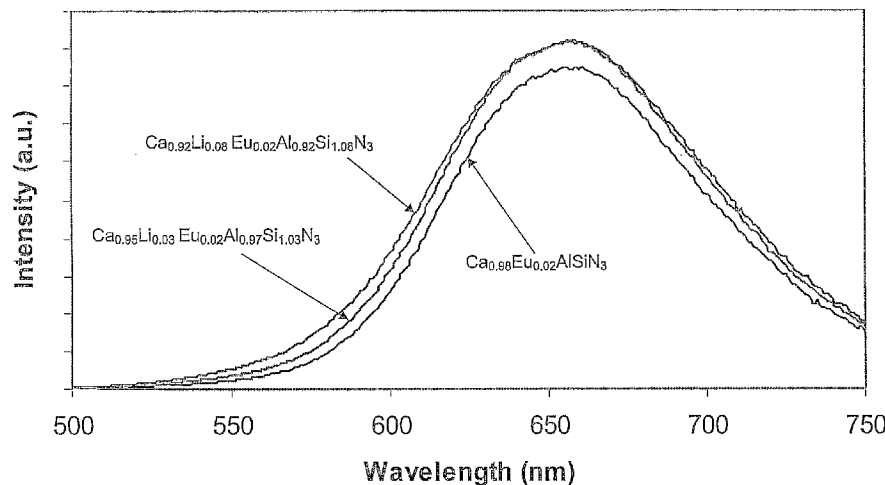
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(54) Title: CHARGE COMPENSATED NITRIDE PHOSPHORS FOR USE IN LIGHTING APPLICATIONS



(57) Abstract: Disclosed are phosphor compositions having the formulas $Ca_{1-a-b}Ce_aEu_bAl_{1+a}Si_{1-a}N_3$, where $0 < a \leq 0.2$, $0 \leq b \leq 0.2$; $Ca_{1-c-d}Ce_cEu_dAl_{1-c}(Mg,Zn)SiN_3$, where $0 < c \leq 0.2$, $0 \leq d \leq 0.2$; $Ca_{1-2e-f}Ce_e(Li,Na)_fEu_fAlSiN_3$ where $0 \leq e \leq 0.2$, $0 \leq f \leq 0.2$, $g+h > 0$; and $Ca_{1-g-h-i}Ce_g(Li,Na)_hEu_iAl_{1+g-h}Si_{1-g+h}N_3$ where $0 \leq g \leq 0.2$, $0 < h \leq 0.4$, $0 \leq i \leq 0.2$, $g+i > 0$. When combined with radiation from a blue or UV light source, these phosphors can provide light sources with good color quality having high CRI over a large color temperature range. Also disclosed are blends of the above phosphors and additional phosphors.

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C. DOCUMENTS CONSIDERED TO BE RELEVANT		
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