$d_2 \in q_1 - q_2$).

Replacing d_2 by $d_3 = (y_2, d_2)$, where $y_2 \in q_1 - q_4$, and repeating the process, we conclude that there exists a factor d of x such that $d \in q_1$ and $d \notin q_j$ ($j = 2,3,\ldots,r$). In other words, with a suitable permutation of $\{ q_j \}_{j=1}^{r}$ we have proved the

Lemma 2. Let x be a non zero non unit of an HCF ring R of Krull type with the family $\{ P_\alpha \}_{\alpha\in I}$ of valued primes defining R, $\{ P_1, P_2, \ldots, P_n \}$ be the set of all the valued primes containing x and let $\{ q_j \}_{j=1}^{r}$ be the set of all the distinct minimal subvalued primes of x, then corresponding to each q_j there exists a $p_j | x$ such that $p_j \in q_j$ and $p_j \notin q_k$ for all $k \neq j$ ($k, j = 1,2,\ldots,r$).

Lemma 2 leads to the notion of an element(in an HCF ring of Krull type at present) with a single minimal subvalued prime and to study the properties of such elements we state the

Lemma 3. Let d be a non zero non unit element in an HCF ring of Krull type R. Let $P_1, P_2, \ldots, P_r$ be the only valued primes(in the family $\{ P_\alpha \}_{\alpha\in I}$) of R containing d and suppose that d has only one minimal subvalued prime q then

(1) If $d = d_1 d_2$, then $(d_1, d_2) = 1$ only if either of d_i is a unit ($i = 1,2$).

(2) If $x \notin q$ but the set of all the valued primes containing x is a subset of $\{ P_1, P_2, \ldots, P_r \}$ then $x^n | d$ for all positive integers n.

(3) If there exists another element d' such that d' has q as the only minimal subvalued prime containing it, then d' belongs to $P_1, P_2, \ldots P_r$ and to no other valued prime in the defining family and there exists a positive integer n such