the original one by a transformation (T) defined by

$$\omega_k' = \sum_j c_k^j \omega_j \,; \quad \bar{\omega}_k' = \sum \bar{c}_k^j \bar{\omega}_j, \quad c_k^j \in K \quad (3)$$

and commuting with the involution, will be called "admissible": such transformations (T) form a group G. By the definition the positive elements of E_{2n} of degree zero are the positive real constants $a \in \mathbb{R}^+$. Further, we will consider a fundamental form

$$\tau_n = c\,(i\omega_1 \wedge \bar{\omega}_1) \wedge \cdots \wedge (i\omega_n \wedge \bar{\omega}_n), \quad (4)$$

where $c \in \mathbb{R}^+$.

In the passage to another admissible basis $(\omega', \bar{\omega}')$, c is replaced by c' in (4) where again $c' \in \mathbb{R}^+$. Every element $\alpha \in E_{2n}$ which can be written as $\alpha = \sum a_k \omega_k$, $a_k \in K$, will be called purely linear.

Definition An element $\phi \in E_{2n}$ is called positive of degree p, $0 \le p \le n$, if

a) ϕ is homogeneous of type (p,p).

b) for each system $L^{n-p} = (\alpha_1, \alpha_2, \ldots, \alpha_{n-p})$ of purely linear elements one has

$$\phi \wedge (i\alpha_1 \wedge \bar{\alpha}_1) \wedge \cdots \wedge (i\alpha_{n-p} \wedge \bar{\alpha}_{n-p}) = \ell(\phi, L^{n-p})\tau_n$$

with $\ell(\phi, L^{n-p}) \in \mathbb{R}^+$.

Consequences.

(1) The set E_+^p of positive elements of degree p is