To convert the given grammar G to an equivalent essentially non-contracting grammar using NULL & CHAIN transformation, we need to eliminate nullable variables & long chain of variables.

Step 1: Eliminate nullable variables
in given grammar nullable variables are S, A & C. We'll use NULL transformation to remove nullable variables.
NULL transformation.

- Add a new start symbol S & new production S' → S
- For each prodn w/ nullable variable, add new productions without those variables.
  eg. Add S' → aA|D
  add S' → aAaA | DaA | aAaAaA | DaAaA | ...

Null transformation generates new productions that accountant for all possible combinations of nullable variables. The resulting grammar will have no nullable variable

Step 2: Eliminating chains of variables.
In this grammar, B → A & C → DD are chains.

CHAIN transformation
- Replace each long chain of variables in grammar with new non-terminal symbols
  Replace B → A with B → B1
  & C → DD with C → C1

- For each production referencing the replaced variable, introduce new productions.
  Add $B1 \rightarrow A$
  Add $C1 \rightarrow DD$

The CHAIN transf^n breaks the long chains & introduces new non terminal symbols to preserve the original grammar's derivations.

After performing NULL & CHAIN transformation the equivalent essentially non-contracting grammar is as follows:

$S' \rightarrow S$
$S' \rightarrow aA \mid D$
$S \rightarrow aA \mid D$
$A \rightarrow bB1 \mid C \mid \lambda$
$B \rightarrow cC \mid B1$
$C \rightarrow dD \mid C1$
$B1 \rightarrow A$
$C1 \rightarrow DD$