

30 DEC 2003

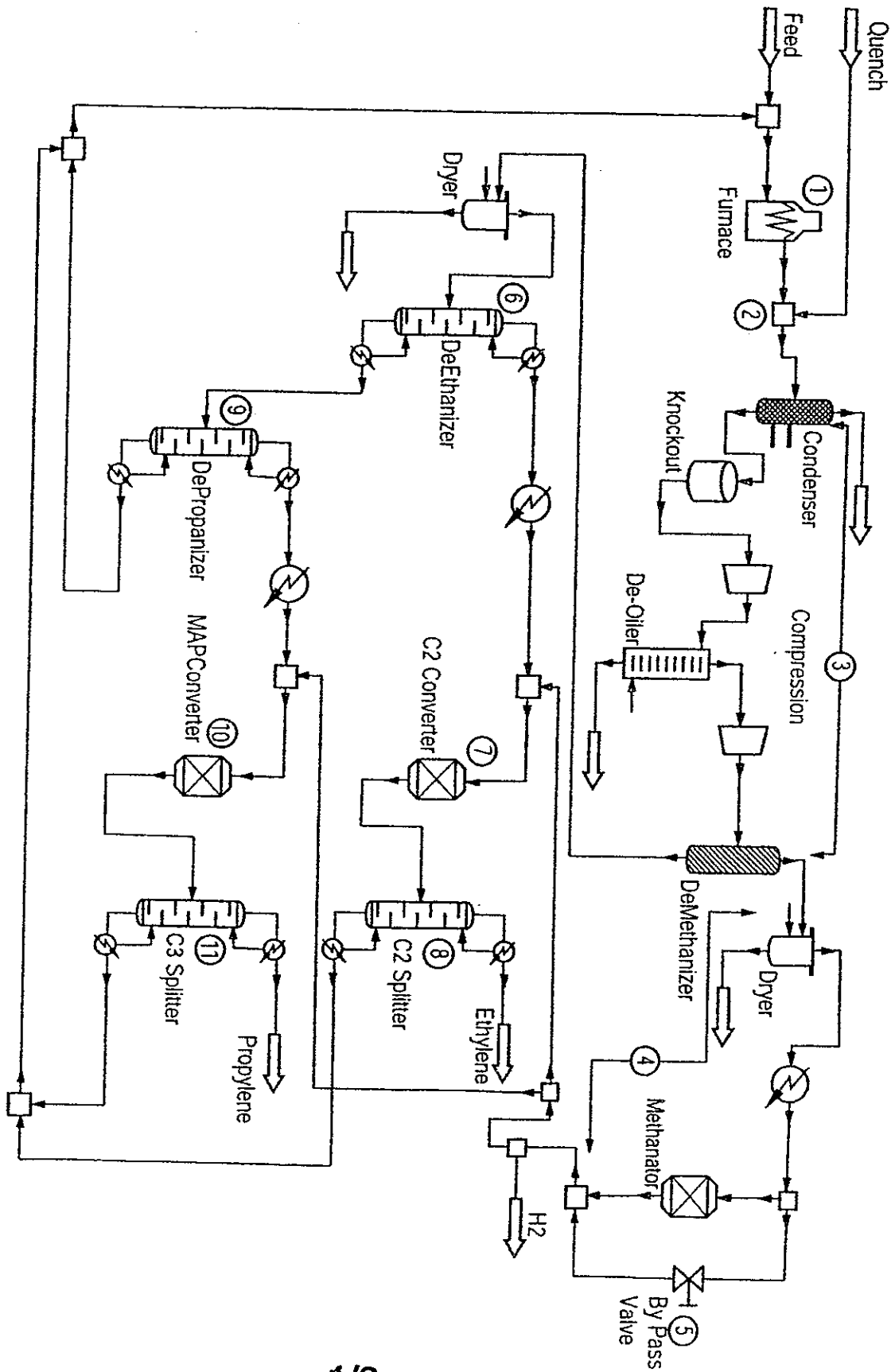


Fig. 1

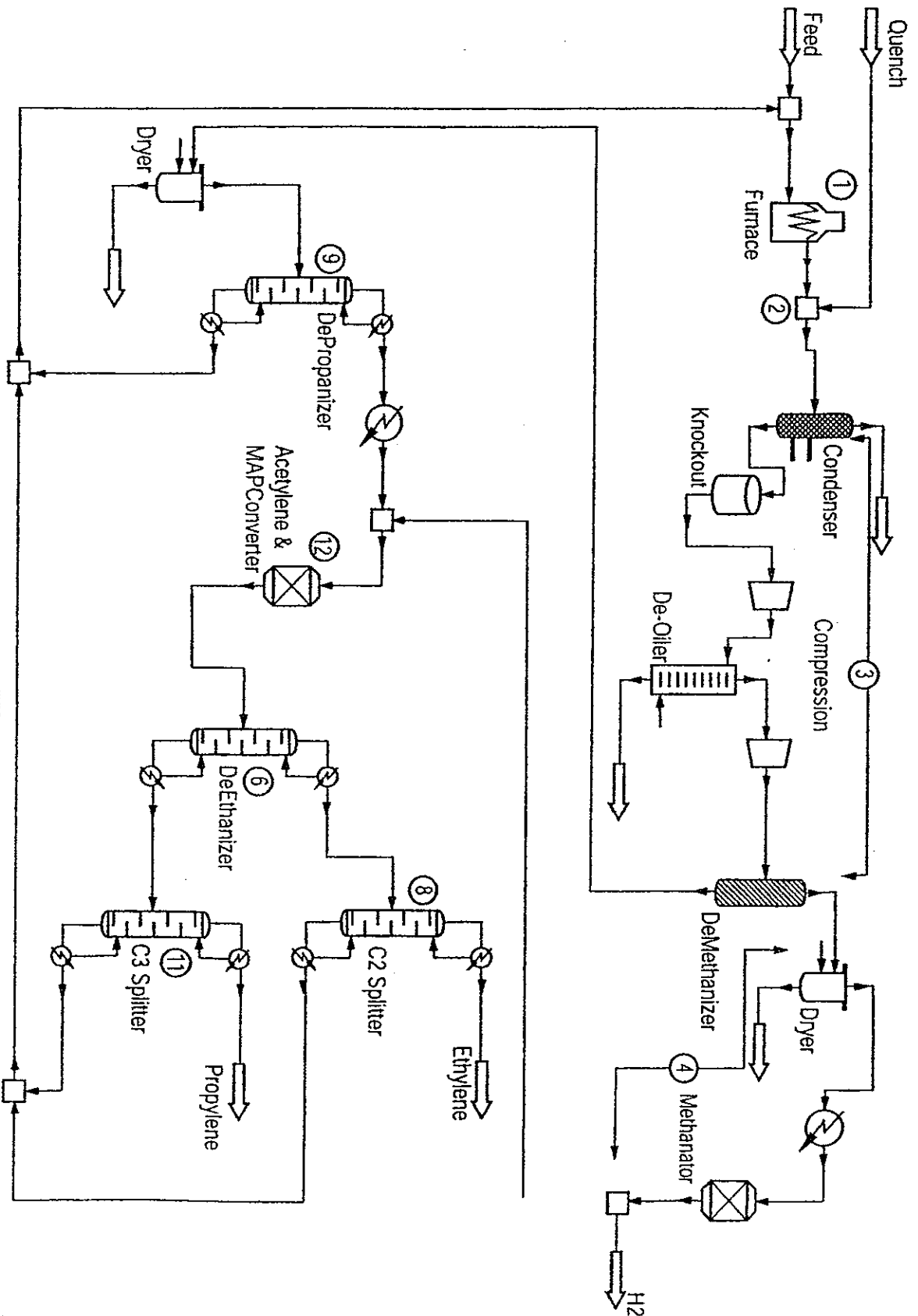


Fig. 2

30 DEC 2003

FIG. 3

CATALYST:

G-58B, lot 89-1, 3x6 mesh, 25cc

TEST:

100 hours

BY THE OLD PROCESS			
C2 ONLY		C3 ONLY	
WEIGHT CONVERTED (grams)		WEIGHT CONVERTED (grams)	
C2H2	145.05	0	
MA	0	203.36	
PD	0	57.12	
TOTAL CONVERTED	145.05	260.48	
WEIGHT FORMED (grams)		WEIGHT FORMED (grams)	
GREEN OIL	0.8732	0.1284	
HEAVY POLYMER	3.6846	0.5445	
C4S	33.6639	0	
C6S	11.1001	40.6860	
TOTAL OLIGOMERS	49.32	41.36	
% WT FORMED/ WT CONV		% WT FORMED/ WT CONV	
GREEN OIL	0.60%	0.05%	
HEAVY POLYMER	2.54%	0.21%	
C4S	23.21%	0.00%	
C6S	7.65%	15.62%	
TOTAL OLIGOMERS	34.00%	15.88%	
C2 SELECTIVITY	27.34%		
C3 SELECTIVITY		26.13%	
		SUMATION OF OLD PROCESSES	
		% WT FORMED/ WT CONV	
		0.65%	
		2.75%	
		23.21%	
		23.27%	
		49.88%	

BY THE NEW PROCESS			
C2+C3			
WEIGHT CONVERTED (grams)			
C2H2	84.23		
MA	68.67		
PD	17.49		
TOTAL CONVERTED	170.39		
WEIGHT FORMED (grams)			
GREEN OIL	1.0204		
HEAVY POLYMER	4.2141		
C4S	12.066		
C6S	18.488		
TOTAL OLIGOMERS	35.79		
% WT FORMED/ WT CONV			
GREEN OIL	0.60%		
HEAVY POLYMER	2.47%		
C4S	7.08%		
C6S	10.85%		
TOTAL OLIGOMERS	21.00%		
C2 SELECTIVITY	48.26%		
C3 SELECTIVITY	98.02%		

PROCESS IMPROVEMENTS
58% REDUCTION OF FOULANT LEVELS
MUCH GREATER SELECTIVITIES