Title (en)
STRETCH BLOW FORMING METHOD AND BLOW FORMING PRESS

Title (de)
VERFAHREN ZUM STRECKBLASEN UND BLASFORMPRESSE

Title (fr)
PROCEDE DE FORMAGE PAR ETIRAGE ET PAR SOUFFLAGE, ET PRESSE DE FORMAGE PAR SOUFFLAGE

Publication
EP 0765213 A1 19970402 (DE)

Application
EP 96901685 A 19960219

Priority
- CH 9600054 W 19960219
- CH 46295 A 19950217

Abstract (en)
[origin: WO9625285A1] The invention proposes reaching the upper stage of the compressed blowing air adiabatically instead of isothermically, as previously, so enabling the entire blowing process to be carried out with the smallest possible amount of energy, and the greatest possible amount of energy to be recovered via a piston pump (14), for example, after blow forming. Preferably, for a first phase, low-pressure blowing air (N) of between 8 and 12 bars is generated isothermically in one or two stages and then adiabatically generated high-pressure blowing air (H) of between 30 and 40 bars reaches the actual pressing stage. Energy can also be recovered electrically by the same means as are used for driving the piston pump (14). A highly significant portion of energy is saved as a result of the upper stage of the compressed air stage being reached adiabatically and provided with a compressed air cushion at the rear of the piston and an additional high-pressure reservoir. Optimum use is made of the dynamic cycle of advance and return movements of the piston. All the sequences are co-ordinated by a central control system (ST).

IPC 1-7
B29C 49/78; F15B 21/14

IPC 8 full level
B29C 49/78 (2006.01); B29C 49/06 (2006.01)

CPC (source: EP)
B29C 49/783 (2013.01); B29C 49/06 (2013.01); B29C 49/4284 (2013.01); B29C 49/42855 (2022.05); B29C 49/4287 (2022.05); B29C 2049/7832 (2022.05); B29C 2949/0715 (2022.05); B29K 2067/00 (2013.01); Y02P 70/10 (2015.11)

Citation (search report)
See references of WO 9625285A1

Designated contracting state (EPC)
BE CH DE ES FR GB IT LI SE

DOCDB simple family (publication)
WO 9625285 A1 19960822; DE 19680085 D2 19970417; EP 0765213 A1 19970402

DOCDB simple family (application)
CH 9600054 W 19960219; DE 19680085 T 19960219; EP 96901685 A 19960219